تحت رعاية جلالة الملك عبدالله الثاني ابن الحسين المعظم

Under the Patronage of His Majesty King Abdullah II Ibn Al-Hussein

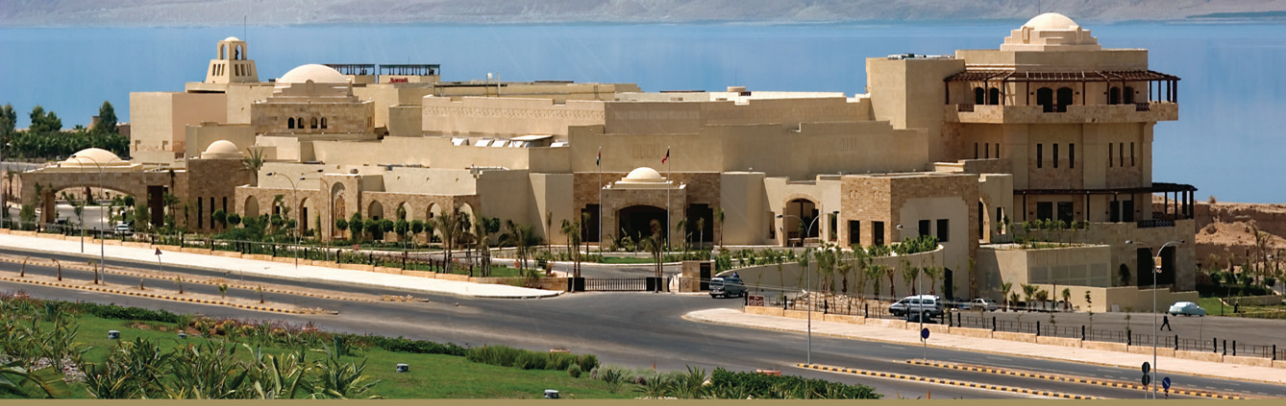
6th International Conference of The Royal Medical Services

المؤتمر الدولي السادس للخدمات الطبية الملكية

19-22 Nov 2012

King Hussein Bin Talal Convention Center

Dead Sea - Jordan



Treating - Training - Teaching تطبيب - تدريب - تعليم

الملخصات العلمية

ABSTRACT BOOK

لغاية ٢٤ ساعة معتمدة للتعليم الطبي المستمر

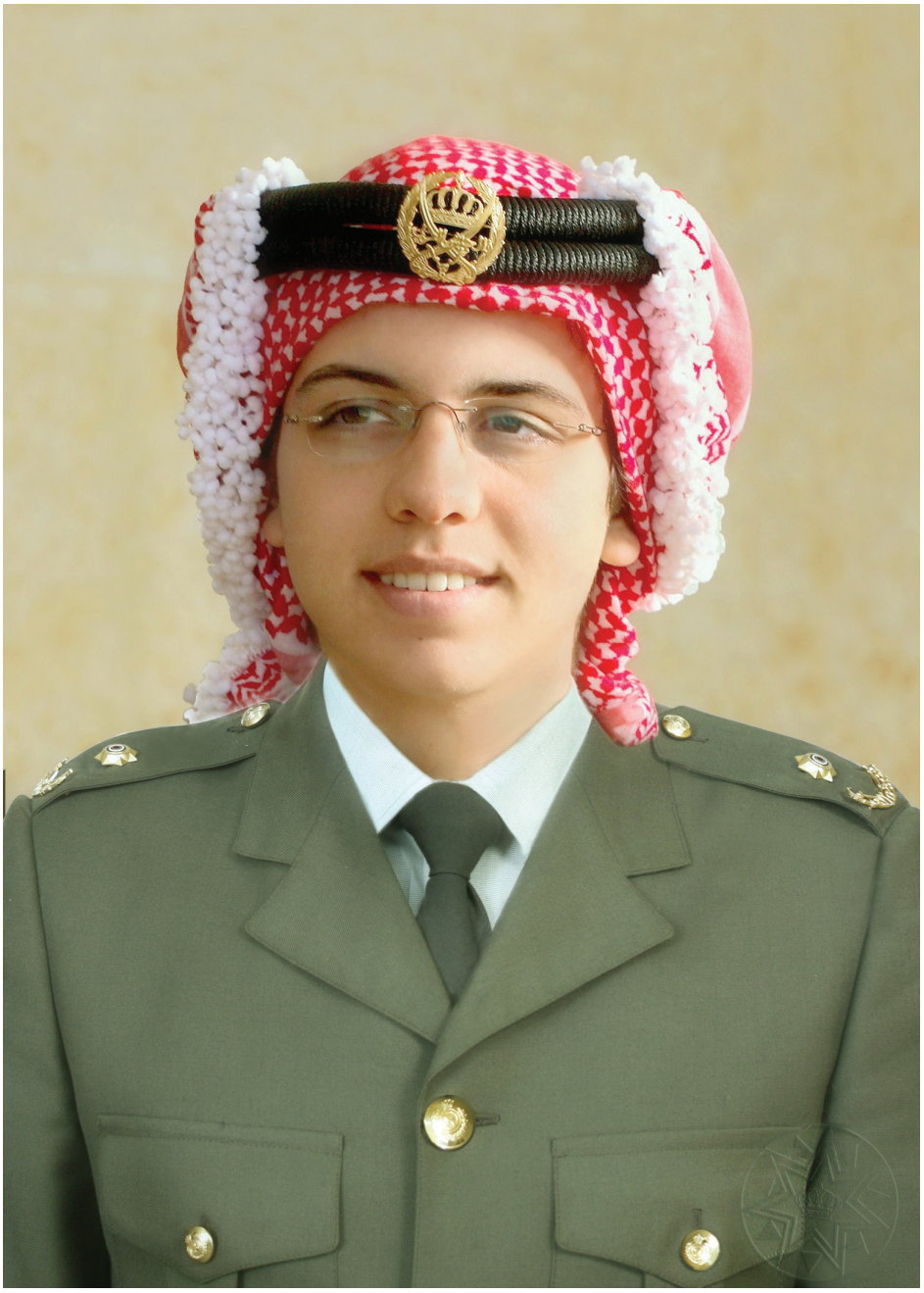
من المجلس الطبي الأردني

Up to 24 CME Hours

Accredited by Jordan Medical Council

His Majesty

King Abdullah II Ibn Al-Hussein

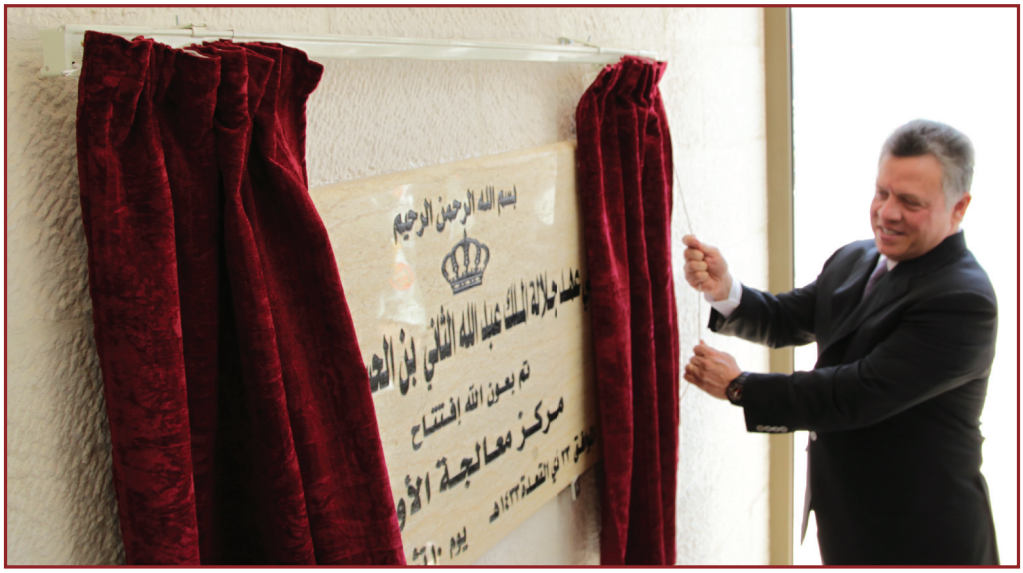


His Royal Highness

Crown Prince Al-Hussein Bin Abdullah II

Contents

Radiotherapy Center
Queen Alia Military Hospital



Inaugurated by His Majesty
King Abdullah II Ibn Al-Hussein
October 2012

Collaboration

Royal College of Physicians
Setting higher medical standards

The Royal College of Surgeons of England

WORLD FEDERATION OF HEMOPHILIA

President's Welcome

It gives us great pleasure to welcome you to the **6th International Conference of the Royal Medical Services** to be held at **King Hussein Bin Talal Convention Center - Dead Sea, Jordan** in the period of 19-22 Nov 2012. We are lucky to host our RMS Conference for the second time in this location (lowest point on earth) after the great success of our previous conference in May 2010. It will be attended by more than 4000 participants, both local and regional in the fields of Medicine, Dentistry, Pharmacy, Nursing, and Allied Health Professions.

The Royal Medical Services Conferences are held once every two years with participation of more than 60 International Guest Speakers from all over the world from different specialties and backgrounds. This provides a unique and broad forum for discussion in Plenary Sessions of topics that bridge the divide between specialties.

Some of you will have attended this conference before and your willingness to return is a testimony to how much you enjoyed your previous visit. For those coming to Jordan for the first time, I am sure it will not be your last. We hope to build bridges, establish new contacts, make new friends and renew old friendships

We are fortunate to have prestigious partnerships for this conference with many International Organizations and Societies, such as the **International Committee of Military Medicine**, **Pan-Arab Regional Group of Military Medicine, Royal College of Surgeons of England, Royal College of Physicians,** and **World Federation of Hemophilia.**

I would also like to thank our many Sponsors for contributing generously to the conference whether by taking a part in the Medical Exhibition or by sponsoring Guest Speakers for the many workshops at hand.

We hope you enjoy your stay at the Dead Sea, where the weather at this time of year is excellent, and also get a chance to explore some of the many other wonders of Jordan.

We are confident that your stay in Jordan will be a memorable scientific & social experience.

Conference President
Director General of the Royal Medical Services
Major General Dr Abdelaziz Ziadat

Scientific Program in Brief

KHBTCC

Monday 19 November 2012

Time	Sea Floor A1 Dead Sea 1	A2 Dead Sea 2	B Mount Nebo 1	C Mount Nebo 2	D Petra 1	E Petra 2	Ground Floor F Wadi Rum 1	G Wadi Rum 2	H Mou'ta	First Floor I Harraneh 1	J Harraneh 5	K Harraneh 6
1 09:00-11:00							Dentistry W30	Orth Surg W08	G Surg W03			
2 11:30-13:30							Dentistry W30	Orth Surg W09	G Surg W03			
13:30-14:30								Lunch				
17:00-18:00	Opening Ceremony											

Tuesday 20 November 2012

Time	Sea Floor A1 Dead Sea 1	A2 Dead Sea 2	B Mount Nebo 1	C Mount Nebo 2	D Petra 1	E Petra 2	Ground Floor F Wadi Rum 1	G Wadi Rum 2	H Mou'ta	First Floor I Harraneh 1	J Harraneh 5	K Harraneh 6
1 09:00-11:00	Nursing		PS SSI	Family & Emergency Medicine	WFH S01	Medicine & Rheumatology	Radiology	Obs & Gyn PS	ENT	Pharmacy W32	Dentistry	
2 11:30-13:30	PS Nursing		Lower GI	Family & Emergency Medicine	WFH S01	Medicine & Rheumatology / Rheumatology S03	Radiology	Obs & Gyn	ENT	Pharmacy W33	Dentistry	Oncology S06
13:30-14:30			Lunch				MRI S04	Simulation S05				
3 14:30-16:30	PS Biomedical Research		Lower GI	Pediatric Surgery	Neurology & Neurosurgery	Pulmonology & Thoracic Surg	Radiology	Obs & Gyn	Rehab	AHP	Nursing	AHP
4 17:00-18:30	PS Biomedical Research		Hepatobiliary Surgery	Pediatric Surgery	Pediatrics	ENT	Radiology	Obs & Gyn	Rehab	AHP	Nursing	Radiology S07

Wednesday 21 November 2012

Time	Sea Floor A1 Dead Sea 1	A2 Dead Sea 2	B Mount Nebo 1	C Mount Nebo 2	D Petra 1	E Petra 2	Ground Floor F Wadi Rum 1	G Wadi Rum 2	H Mou'ta	First Floor I Harraneh 1	J Harraneh 5	K Harraneh 6
1 09:00-11:00	PS Breast Cancer	PS Dentistry 1	PS Osteoporosis	Cardiac & Vascular Surgery	Intensive Care	Laboratory Medicine	PS Diabetes Mellitus	Pediatrics	Community Medicine	Pharmacy	Nursing W34	
2 11:30-13:30	Urology	PS Dentistry 2	Orthopedic Surgery	Cardiology	Ophthalmology	Anesthesia	RCP Guidelines S02	PS Bone Marrow Transplantation	Plastic Surgery & Dermatology	Pharmacy	Psychiatry	Radiology S07
13:30-14:30							Simulation S05	CT Scan S08				
3 14:30-16:30	Breast Surgery	PS Dentsitry 3	Orthopedic Surgery	Cardiology	Ophthalmology	Laboratory Medicine	PS Military Medicine	Pediatrics	Interventional Radiology S09 + S10	Pharmacy	Nursing W35	
4 17:00-18:30	Nephrology	PS Dentsitry 4	Orthopedic Surgery	Endocrinology	Ophthalmology	Anesthesia	Military Medicine	Pediatrics	Dermatology & Plastic Surgery	Community Medicine	Free Papers	

Thursday 22 November 2012

08:30-13:45 Military Delegations Tour to King Hussein Medical Center (Amman)

Scientific Workshops

Symposia

No	Specialty	Title	Moderators	Date	Time	Hall	Venue
S01	Hematology	World Federation of Hemophilia **Assad Haffar MD (Canada)** **Bernadette Garvey MD (Canada)** **Flora Peyvandi MD (Italy)** **Rezan Abdul- Kadir MD (UK)** **Samir Faouri MD (Jordan)**	Moustafa Al-Falah MD Mufeed Al-Hammouri MD Hala Rimawi MD Mousa Barqawi MD Basem Kiswani MD Rami Al-Majali MD	20/11/2012	09:00-13:30	Hall D	KHBTCC
S02	Clinical Guidelines Royal College of Physicians	Clinical Practice Guidelines **Elizabeth Avital (UK)** **Rhona Buckingham (UK)** (Royal College of Physicians)	Ali Jawad MD (UK) Alaa Al Hersh MD Atallah Al-Issa MD	21/11/2012	11:30-13:30	Hall F	KHBTCC
S03	Rheumatology Roche	New Insights on Biologic Monotherapy **Rieke Alten PhD (Germany)** (Sponsored by Roche)	Alaa Al Hersh MD Adel Wahadneh MD	20/11/2012	12:40-13:40	Hall E	KHBTCC
S04	Radiology GE Healthcare	Visionary MR Imaging Techniques **Paul Jamous (Lebanon)** (Sponsored by GE Healthcare)	Adballah Jameel MD Asem Hiari MD	20/11/2012	13:30-14:30	Hall F	KHBTCC
S05	Medical Learning and Simulation CAMLS	University of South Florida Health›s Center for Advanced Medical Learning and Simulation (CAMLS) **Dr Judy Genshaft (USA)** **Dr Stephen Klasko (USA)** **Dr Deborah Sutherland (USA)** (Sponsored by CAMLS LSI)	Chip Diehl (USA) Aous Qutaishat (USA) Amer Amireh MD	20/11/2012 21/11/2012	13:30-14:30 13:30-14:30	Hall G Hall F	KHBTCC
S06	Oncology HIKMA	Global Development of Biosimilar Products **Stanley (Seung Suh) Hong PhD (Korea)** (Sponsored by Hikma Pharmaceuticals)	Ahmad Telfah MD Raid Marji MD	20/11/2012	12:00-13:00	Hall K	KHBTCC
S07	Radiology FHS	Implementation of the Agility 160 leaf MLC - Initial Experience of its Clinical Advantage **Chris Walker MD (UK)** (Sponsored by Al Faisaliah Healthcare Systems Co.)	Sameer Khraisat MD Belal Hiari MD	20/11/2012 21/11/2012	17:00-18:30 11:30-13:30	Hall K	KHBTCC
S08	Radiology GE Healthcare	New Trends & Advanced Applications in CT **Melhem Younan BSc (UAE)** (Sponsored by GE Healthcare)	Abdallah Al-Omari MD Imad Athamneh MD	21/11/2012	13:30-14:30	Hall G	KHBTCC
S09	Neuro-Interventional Radiology MicroVention TERUMO	Subarachnoid Hemorrhage Management **Gyula Gal MD (Sweden)** **Hazem Habboub MD (Jordan)** (Sponsored by Al-Waed Medical Company, MicroVention TERUMO USA)	Amer Al-Shurbaji MD Moneer Dheat MD	21/11/2012	14:30-15:30	Hall H	KHBTCC
S10	Neuro-Interventional Radiology BALT	Cerebrovascular Diseases **Gyula Gal MD (Sweden)** **Sultan Al-Qahtani MD (Saudi Arabia)** (Sponsored by Al-Waed Medical Company, BALT EXTRUSION France)	Hazem Habboub MD Majed Habahbeh MD	21/11/2012	15:30-16:30	Hall H	KHBTCC

Workshops

No	Specialty	Title	Moderators / Liaison Officer	Date	Time	Hall	Venue
W01*	Basic Surgical Training	Faculty Development Day Royal College of Surgeons (UK)	Ahmad Uraiqat MD	15/11/2012	8:45-17:00	BEI	KHMC
W02**		Basic Surgical Skills Course (BSS) Royal College of Surgeons (UK)	Ahmad Uraiqat MD	16/11/2012 17/11/2012	8:15-17:30	BEI	KHMC
W03	General Surgery	Challenging Cases in Colorectal Surgery Sarah O'Dwyer MD (UK)	Hanan Rihani MD Amer Amireh MD	19/11/2012	09:00-12:00	Hall H	KHBTCC
W04****	Neurosurgery	Neurosurgical Approach Luis Borba MD (Brazil)	Abdullah Akayleh MD	17/11/2012 18/11/2012	08:00-16:00	PH	KHMC
W05	Plastic Surgery	High Definition VASER Liposuction Cemal Senyuva MD (Turkey)	Waleed Haddadin MD	18/11/2012	10:00-13:00	PHA	KHMC
W06****	Pediatric Surgery	Urinary Bladder and Lower Urinary Tract Reconstructive Surgery John Park MD (USA)	Ibrahem Daradkeh MD	18/11/2012 19/11/2012	07:00-16:00 07:00-14:00	QRPHA	KHMC
W07***	Urology	Management of Kidney and Ureteric Stone in using Laser (Sponsored by Jordan Medicare Corp) Thomas Knoll MD (Germany)	Firas Hammouri MD	22/11/2012	08:00 - 16:00	PHCUOT	KHMC
W08	Orthopedic Surgery	ACL Repair in High-Level Athletes: Predictive Factors of Come Back (Sponsored by Al-Wafi Drug Store) Alfred Khoury MD (Lebanon)	Issam Dahabra MD Ayman Mustafa MD	19/11/2012	10:00- 11:00	Hall G	KHBTCC
W09	Orthopedic Surgery	TSF (Tylor Spatial Frame) for Deformity Correction (Sponsored by Petra Drug Store) Ahmad Bo-Eisa MD (Saudi Arabia)	Mahmoud Odat MD Ayman Mustafa MD	19/11/2012	11:30-13:30	Hall G	KHBTCC
W10****	ENT	Head & Neck Surgery Workshop K. Thomas Robbins MD (USA)	Shawkat Al-Tamimi MD	17/11/2012 18/11/2012	08:00:16:00	KHHL	KHMC
W11****	ENT	Rhinology FESS David Parsons MD (USA)	Deifallah Al-Raqad MD	19/11/2012	08:00-14:00	KHHL	KHMC
W12****	ENT	Difficult Pediatric Airways David Parsons MD (USA)	Eiad Al-Safadi MD	22/11/2012	08:00-17:00	QRPHA	KHMC
W13***	ENT	Otology and Base of Skull Surgery (Sponsored by Jordan Hearing Aids) Michael McGee MD (USA)	Mefleh Al-Sarahan MD	22/11/2012 23/11/2012	08:00 - 16:00 08:00 - 16:00	KHHOR - ENT	KHMC
W14***	Obstetrics & Gynecology	Laparoscopic Surgery Workshop (Sponsored by Jordan Medicare Corp) Mustapha Chaaban MD (Lebanon)	Amer Gharaybeh MD	18/11/2012	08:00-16:00	Gyn OR	KHMC
W15	Obstetrics & Gynecology	Fetal Ultrasound Workshop Zarko Alfirevic MD (UK)	Maher Maaytah MD	19/11/2012	08:00-14:00	FMU	KHMC

No	Specialty		Title	Moderators / Liaison Officer	Date	Time	Hall	Venue
W16***	Interventional Radiology & Vascular Surgery	COVIDIEN positive results for life	Peripheral Vascular Malformations: Endovascular Concepts (Sponsored by EV3 / COVIDIEN) Khalid Al-Naqabi MD (UAE)	Hazem Habboub MD Sizeph Haddad MD Maher Al-Khawaldeh MD	13/11/2012	09:00-17:00	Cath Lab	KHMC
W17***	Interventional Radiology & Vascular Surgery	ev3	Critical Limb Ischemia: New Frontiers (Sponsored by EV3 / COVIDIEN) Hani Al-Fadel MD (Bahrain)	Fayek Haddadin MD Izzedin Qtaish MD Mamoun Al-Bashir Sizeph Haddad MD	14/11/2012	09:00-17:00	Cath Lab	KHMC
W18***	Interventional Radiology & Neurology	MicroVention TERUMO COVIDIEN positive results for life BALT EXTRUSION	Petra - Jordan Live Course in Interventional Neuoradiology (Sponsored by Microvention - Terumo,Covidien, Balt EXTRUSION) Gyula Gal MD (Sweden) Sultan Qahtani MD (Saudi Arabia)	Hazem Habboub MD Sizeph Haddad MD Maher Al-Khawaldeh MD	15/11/2012	09:00-17:00	Cath Lab	KHMC
W19***	Interventional Radiology & Vascular Surgery	Medtronic	Thoracic and Abdominal Aortic Aneurysm Endovascular Repair with Difficult Fixation Zone (Sponsored by Medtronic) Murat Aksat MD (Turkey)	Fayek Haddadin MD Hazem Habboub MD Mamoun Al-Bashir MD	18/11/2012	09:00-17:00	Cath Lab	KHMC
W20	Interventional Radiology & Vascular Surgery	MicroVention TERUMO	Basic Concepts in Neural Catheterization: MicroVention TERUMO Simulator Hand on training (Sponsored by Al-Waed Medical Company, MicroVention TERUMO USA) Jean-Claude Lechien MD (France) Barbara Pichon MD (France) Hazem Habboub MD (Jordan)	Izzedin Qtaish MD Maher Al Khawaldeh MD	20/11/2012 21/11/2012	09:00-18:00 09:00-18:00	Umm Qais Hall	KHBTCC
W21	Anesthesia		Anaesthetic Crisis Simulation, One Lung Simulation Course Omar Al-Rawi MD (UK)	Muath Kreishan MD	18/11/2012	08:00-16:00	KHHOR	KHMC
W22***	Anesthesia		Ultrasound Guided Nerve Blocks Steven Clendenen MD (USA)	Jamal Izzat MD	22/11/2012	08:00-16:00	KHHOR	KHMC
W23	Ophthalmology		Medically Unexplained Presentation (Neuro-Opthalmology & Neurology) Gordon Plant MD (UK)	Majed Habahbeh MD Suha Al-Eajailat MD Mosa Almadani MD	18/11/2012	09:00-14:00	QRPHL	KHMC
W24***	Ophthalmology		The Art of Visual Rehabilitation / Complex Phaco, Keratoprostheses Christopher Liu MD (UK)	Nancy Al-Raqad MD	19/11/2012	09:00-14:00	Ophth Dep	KHMC
W25	Emergency Medicine		The Charite Emergency Medicine Workshop Martin Mockel MD (Germany) Julia Searle MD (Germany) Tobias Lindner MD (Germany) Johanna Bokemeyer MD (Germany) Jorn Vollert MD (Germany)	Ahmad Saleem MD	19/11/2012	09:00-13:30	PHA	KHMC

No	Specialty	Title	Moderators / Liaison Officer	Date	Time	Hall	Venue
W26***	Gastroenterology	Upskilling Course in Colonoscopy John Anderson (UK) Roland Valori (UK)	Zakareya Mrayat MD	18/11/2012	08:00-16:00	GI Unit	KHMC
W27	Neurology	Approach to the Patient With a Movement Disorder Niall Quinn (UK)	Muneer Dhayyat MD Majed Habahbeh MD	19/11/2012	09:00-12:00	PH	KHMC
W28***	Dermatology	Fillers and Botulinum Toxin Anthony Benedetto MD (USA)	Issam Omeish MD	22/11/2012	11:00-13:00	PH	KHMC
W29**	Dentistry	Theory and Practice of Root Canal Re-treatment Paul Dummer (UK)	Dr Ehab Rasas	18/11/2012	09:00-15:00	BEI	KHMC
W30	Dentistry	How to Develop your Clinical Skills and Improve your Performance in an Olympic Fashion? Rajesh Patel (UK)	Dr Rania Samarah	19/11/2012	09:00-13:30	Hall F	KHBTCC
W31	Dentistry	Behavioral Management in Children: Pharmacological Techniques and Inhalation Sedation Richard Widmer (Australia)	Dr Maen Al Far	20/11/2012	11:30-16:00	PH	KHMC
W32	Pharmacy	Pharmaceutical Care / Medicines Management James C. McElnay PhD (UK)	Col Emad Nsour Pham	20/11/2012	09:00-11:00	Hall I	KHBTCC
W33	Pharmacy	Pharmacoeconomics Measuring and Estimating Costs Qais Alefan PhD (Jordan)	Lt Col Kholoud Qoul Pham	20/11/2012	11:30- 13:30	Hall I	KHBTCC
W34	Nursing	Developing the Skills for Effective Communication with the Cancer Patient and Their Families Sara Lister (UK) Alexandra West Oram (UK)	Col. Dr. Mohammad Banikhaled	21/11/2012	14:30-16:30	Hall J	KHBTCC
W35	Nursing	Nurse Competence Evaluation Riitta Meretoja RN PhD (Finland)	Col Hazem Fanash	21/11/2012	09:00-11:00	Hall J	KHBTCC
W36	Speech Therapy	Differential Diagnosis & Management of Voice & Upper Airway Problems Gayle Woodson MD (USA)	Abdelrahim Ateyeh PhD	16/11/2012 17/11/2012 18/11/2012 19/11/2012	08:00-16:00 08:00-16:00 08:00-16:00 08:00-13:30	NCAR	KHMC
W37	Medical Nutrition	Medical Nutrition Therapy in the Hospital Setting: Advancement & Techniques Annalynn Skipper PhD (USA)	Abdelrahim Ateyeh PhD	17/11/2012 18/11/2012 19/11/2012	09:00-15:30 09:00-15:30 09:00-13:30	PMCA	KHMC

Hall A
Dead Sea Hall

09:00 - 11:00 - Session 1
Nursing
Moderators: Prof. Muayyad Ahmad, Brig. Gen. Reyad Al Dghem

09:00 - 09:30	**Opening Ceremony**
09:30 - 09:40	**Break**
09:40 - 10:00 1	Leishmania Diagnosis *Dr Nawal Sameeh Hijjawi (Jordan)*
10:00 - 10:20 2	Nursing Workforce: Policy Implications for Health Reform *Dr Rowaida Al-Ma'aitah (Jordan)*
10:20 - 10:40 3	Resilience and Leadership Ms Sarah Lister, Nursing, Royal Marsden (UK)
10:40 - 11:00 4	Evaluation of Nurse's Competencies and Developmental Challenges *Dr Riitta Meretoja (Finland)*
11:00 - 11:30	**Coffee Break**

11:30 - 13:30 - Session 2
Nursing Plenary Session
Enhancing the Quality of Life of Cancer Patients
Moderators: Dr. Fathieh Abu-Moghli, Retired Brig. Gen. Ali Alzghoul, Lt. Col. Dr. Mona Al Nsour

11:30 - 11:45 5	Overview of Cancer Care in RMS *Raid Marji MD, Oncology Medicine (Jordan)*
11:45 - 12:00 6	Supportive Communication: an Essential Component of the Care of any Cancer Patient *Ms Sarah Lister, Nursing, Royal Marsden (UK)*
12:00 - 12:15 7	Role of Psychology in Pain Management *Dr Amineh Al Tamimi, Psychology, King Hussein Cancer Center (Jordan)*
12:15 - 12:30 8	Pain Management in Patients with Cancer in Jordan *Mustafa Beano MD, Palliative Medicine (Jordan)*
12:30 - 12:45 9	Nutritional Support of Patients with Cancer *Dr Annalynn Skipper, Clinical Nutrition (USA)*
12:45 - 13:00 10	Supporting New Roles in Cancer Services: The Importance of an Educational Framework *Ms Alexandra West Oram, Nursing, Royal Marsden (UK)*
13:00 - 13:30	Plenary Discussion
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3
Plenary Session
Introduction to Biomedical Research
Moderators: Saad Al-Kharabsheh MD, Saleh Al-Odwan MD, Mohammad Abdelfatah Alzouby MD

14:30 - 15:15 11	Selection of a Study Population and Study Design *Saher Shuqaidef MD (Jordan)*
15:15 - 16:00 12	Writing a Manuscript *Hashem Jaddou MD (Jordan)*
16:00 - 16:30 13	Ethics and Good Clinical Practice in Research *Salah Mawajdeh MD (Jordan)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4
Plenary Session
Introduction to Biomedical Research
Moderators: Akram Eltom MD, Bassam Al Hijjawi MD, Eqab Abu Wendi MD

17:00 - 18:00 14	Quantification and Interpretation of Statistical Associations *Anwar Batieha MD (Jordan)*
18:00 - 18:30	Plenary Discussion

Hall B
Mount Nebo Hall 1

09:00 - 11:00 - Session 1
Plenary Session: Surgical Site Infection (SSI)
Moderators: Mahmoud Abu-Khalalf MD, Salam Daradkeh MD, Tahsin Muhajar MD, Tareq Abu-Sbeih MD

09:00 - 09:20 15	Surgeon Role in Decreasing SSI *Sarah O'Dwyer MD (UK)*
09:20 - 09:40 16	Prevention is Better than Cure *Wail A. Hayajneh MD (Jordan)*
09:40 - 10:00 17	Emerging Strains of Resistant Bugs, What to do? Montaser Bilbisi MD (Jordan)
10:00 - 10:20 18	Role of Microbiologist in Treating SSI *Azmi Mahafzah MD (Jordan)*
10:20 - 10:40 19	New Generations of Antibiotics, Please Use Wisely *Dr Lama Kazan (USA)*
10:40 - 11:00 20	Management of Severe Sepsis in 2012 and Beyond *Ayman O. Soubani MD (USA)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2
Lower Gastrointestinal Tract
Moderators: Tareq Al-Jaberi MD, Jamal Haddad MD, Imad Ghzawi MD

11:30 - 11:50 21	Complex Colon and Rectal Cancer *Sarah O'Dwyer MD, Colorectal Surgery (UK)*
11:50 - 12:10 22	How to Deal with Difficult or Big Colonic Polyps *John Anderson MD, Gastroenterology (UK)*
12:10 - 12:30 23	GI Complications of Cancer Treatment *Sarah O'Dwyer MD, Colorectal Surgery (UK)*
12:30 - 12:50 24	Assessing Colonoscopy *Roland Valori MD, Gastroenterology (UK)*
12:50 - 13:10 25	Current Management of Peritoneal Carcinomatosis *Sarah O'Dwyer MD, Colorectal Surgery (UK)*
13:10 - 13:20 26	Colorectal Cancer at One Referral Center *Amer Amireh MD (Jordan)*
13:20 - 13:30	Discussion
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3
Lower Gastrointestinal Tract
Moderators: Khaled Jadallah MD, Waleed Obeidat MD, Wael Na'san MD

14:30 - 14:50 27	Quality Assurance of Endoscopy and Other Medical Services *Roland Valori MD, Gastroenterology (UK)*
14:50 - 15:10 28	Endoscopy - The View Looking Forward *John Anderson MD, Gastroenterology (UK)*
15:10 - 15:30 29	The Role of Clinical Leaders in Modern Health Care *Roland Valori MD, Gastroenterology (UK)*
15:30 - 15:50 30	Key Elements of Endoscopy Training *John Anderson MD, Gastroenterology (UK)*
15:50 - 16:00 31	Reversal of Hartman's Operation by Single Port Applied to the Colostomy Incision *Fahmi Besharat MD (Spain)*
16:00 - 16:10 32	Management of Fistula-in-Ano *Ahmad Uraiqat MD (Jordan)*
16:10 - 16:20 33	Diffuse Giant Small Bowel Diverticulosis Presenting with Intestinal Obstruction: A Case Report and Literature Review *Jehad Odeh MD (Jordan)*
16:20 - 16:30	Discussion
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4
Hepatobiliary Surgery
Moderators: Abdelhadi Breizat MD, Basheer Al-Jarrah MD, Salah Halaseh MD

17:00 - 17:20 34	Screening Patients for Hepatocellular Cancer *Steven Curley MD (USA)*
17:20 - 17:30 35	Asisted ERCP by Laparoscopy in Biliopancreatic Diversion without Gastrectomy, and Other Cases *Fahmi Besharat MD (Spain)*
17:30 - 17:50 36	Targeted Nanoparticles and Non-Invasive RF Thermal Therapy for Liver and Pancreas Cancer *Steven Curley MD (USA)*
17:50 - 18:10 37	Surgical and Regional Treatment of Hepatocellular Cancer *Steven Curley MD (USA)*
18:10 - 18:20 38	Laparoscopic Biliopancreatic Diversion, for the Treatment of DM II *Fahmi Besharat MD (Spain)*
18:20 - 18:30 39	Laparoscopic Adrenalectomy; 6 Years Experience at King Hussein Medical Center *Talal Al-Jalabneh MD (Jordan)*
18:20 - 18:30 40	Pancreas Transplantation: Lessons Learned From a Decade of Experience at Wake Forest Baptist Medical Center *Samer Al-Geizawi MD (Jordan)*

Hall C
Mount Nebo Hall 2

09:00 - 11:00 - Session 1
Family & Emergency Medicine
Moderators: Farhan Kasasbh MD, Jamil Al-Refai MD, Mohammad Habahbeh MD

09:00 - 09:20 41	ED Essentials on STEMI and non-STEMI *Martin Möckel MD (Germany)*

09:20 - 09:40 42 — Pneumothorax : Current Concepts of Treatment
Tobias Lindner MD (Germany)

09:40 - 10:00 43 — The Value of Triage in a Busy Emergency Department
Suleiman Abbadi MD (Jordan)

10:00 - 10:20 44 — Shock to the Heart! Cardiac Monitoring after Electrical Injury
Julia Searle MD (Germany)

10:20 - 10:40 45 — Management of Cardiogenic Shock in the ED
Martin Möckel MD (Germany)

10:40 - 10:50 46 — Health Care Quality and Patient Safety: New Trends and Strategies for Health Care Quality Improvement
Atallah Al-Issa MD (Jordan)

10:50 - 11:00 47 — Medical Teams under Pressure in the Emergency Department
Ahmad Aldhoun MD (Jordan)

11:00 - 11:30 — Coffee Break

11:30 - 13:30 - Session 2
Family & Emergency Medicine
Moderators: Fareehan Barghothi MD, Mohammad Al-Tarawneh MD, Suliman Abadi MD

11:30 - 11:50 48 — The Challenges Ahead for Global Primary Care and Family Medicine
Michael Kidd MD (Australia)

11:50 - 12:10 49 — A Reading in the Health Care Scene of Jordan
Mazen Al-Bashir MD (Jordan)

12:10 - 12:30 50 — Hyperbaric Oxygen Treatment (HBOT) in Jordan; History And Facts
Jamil Elrefai MD (Jordan)

12:30 - 12:50 51 — Clinical Practice Guidelines in Family Medicine
Michael Kidd MD (Australia)

12:50 - 13:00 52 — Elderly Patients in Family Practice: Polypharmacy and Inappropriate Prescribing in Jordan
Nada Yasein MD (Jordan)

13:00 - 13:10 53 — Comparison Study of Arterial and Venous Blood Gases Values for Patients Admitted to Emergency Department at King Hussein Medical Center
Abdallah Al-Mherat MD (Jordan)

13:10 - 13:30 — Discussion

13:30 - 14:30 — Lunch Break

14:30 - 16:30 - Session 3
Pediatric Surgery
Moderators: Mazen Nsair MD, Hayel Ejelat MD, Emad Habaibeh MD

14:30 - 15:00 54 — Surgical Management of Neuropathic Urinary and Fecal Incontinence
John M. Park MD (USA)

15:00 - 15:10 55 — Lap-Assisted Endorectal Pull-Through for Hirschsprung's Disease
Emad Habaibeh MD (Jordan)

15:10 - 15:20 56 — Laparoscopic and Laparoscopic Assisted Pyeloplasty for Repair of Pelvi-Ureteric Junction Obstruction in Children
Majed Sarayrah MD (Jordan)

15:20 - 15:30 57 — Vesicoureteric Reflux in Children: Experience at King Hussein Medical Center
Ibrahim Daradka MD (Jordan)

15:30 - 15:40 58 — Pediatric Urolithiasis: Incidence and surgical experience At King Hussein Medical Center
Ibrahim Sbou (Jordan)

15:40 - 15:50 59 — Oral Antibiotic Post Stented Hypospadias Repair: Is There Any Role in the Prevention of Urinary Tract Infections?
Mohammed Suoub MD (Jordan)

15:50 - 16:00 60 — Inverted Y on V Meatourethroplasty for Distal Penile Hypospadias: Our Experience at Queen Rania Al-Abdullah Hospital for Children
Waseem Al-Meflh MD (Jordan)

16:00 - 16:10 61 — Laparoscopic Treatment of Ovarian Cysts and Masses in Children
Ahmad Abo-Gorah MD (Jordan)

16:10 - 16:20 62 — Laparoscopic Fundoplication for Thoracic Stomach and Achalasia in Children
Najeh Alomari MD (Jordan)

16:20 - 16:30 — Discussion

16:30 - 17:00 — Coffee Break

17:00 - 18:30 - Session 4
Pediatric Surgery
Moderators: Mohammad Al-Omari MD, Bassam Samawi MD, Ibraheem Daradka MD

17:00 - 17:30 63 — Use of Oral Mucosa Graft for Complex Hypospadias Reconstructions
John M. Park MD (USA)

17:30 - 17:40 64 — Laparoscopic Transperitoneal Extra-Vesical Ureteric Reimplantation for Vesicoureteric Reflux in Children
Najeh Alomari MD (Jordan)

17:40 - 17:50 65 — One Port Mini-Laparoscopic Inguinal Herniotomy in Children
Ahmad Al-Raymoony MD (Jordan)

17:50 - 18:00 66 — Prescrotal Orchiopexy for Palpable Undescended Testicle: Initial Experience and Comparison with the Standard Inguinal Approach
Mohammed Suoub MD (Jordan)

18:00 - 18:10 67 — Utilizing Laparoscopy for Anorectal and Colonic Conditions in Children
Mohamad Dajah MD (Jordan)

18:10 - 18:30 — Discussion

Hall D
Petra Hall 1

09:00 - 11:00 - Session 1 - Symposium 1
World Federation of Hemophilia
Moderators: Moustafa Al-Falah MD, Hala Rimawi MD, Mufeed Al-Hammouri MD

09:00 - 09:30 68 — Thrombophilia: the Promotion of Blood Clotting
Bernadette Garvey MD (Canada)

09:30 - 10:00 69 — Rare Bleeding Disorders
Flora Peyvandi MD (Italy)

10:00 - 10:30 70 — Menorrhagia and Bleeding Disorders: Management Options
Rezan Abdul- Kadir MD (UK)

10:30 - 11:00 71 — Home Treatment In Haemophilia
Assad Haffar MD (Canada)

11:00 - 11:30 — Coffee Break

11:30 - 13:30 - Session 2 - Symposium 1
World Federation of Hemophilia
Moderators: Mousa Barqawi MD, Basem Kiswani MD, Rami Al-Majali MD

11:30 - 12:00 72 — ITP: Unclear Terminology, Uncertain Etiology, Arguable Management
Bernadette Garvey MD (Canada)

12:00 - 12:30 73 — Thrombotic Thrombocytopenic Purpura (TTP) Treatment
Flora Peyvandi MD (Italy)

12:30 - 13:00 74 — Women with Inherited Bleeding Disorders – Reproductive Choices
Rezan Abdul- Kadir MD (UK)

13:00 - 13:30 75 — A Proposed Model of Prophylaxis in Patients with Haemophilia Type A in Jordan
Samir Faouri MD (Jordan)

13:30 - 14:30 — Lunch Break

14:30 - 16:30 - Session 3
Neurosurgery & Neurology
Moderators: Mahmoud Al-Karmi MD, Muhammed Husban MD, Muneer Dhayyat MD, Nidal Khasawneh MD

14:30 - 14:50 76 — Transpetrosal Approaches to the Skull Base
Luis A. B. Borba MD (Brazil)

14:50 - 15:10 77 — Differential Diagnosis of Parkinsonism
Niall Quinn MD (UK)

15:10 - 15:30 78 — Anterior Clinoidal Meningiomas
Luis A. B. Borba MD (Brazil)

15:30 - 15:50 79 — Treatment of Parkinson's Disease
Niall Quinn MD (UK)

15:50 - 16:10 80 — Tumors of Jugular Foramen
Luis A. B. Borba MD (Brazil)

16:10 - 16:30 81 — Hyperkinetic Movement Disorders
Niall Quinn MD (UK)

16:30 - 17:00 — Coffee Break

17:00 - 18:30 - Session 4
Pediatrics
Moderators: Saeed Al-Azab MD, Fakhri Al-HakeemMD, Mueen Habashneh MD

17:00 - 17:10 82 — Initial Experience of Atrial Septal Defect Closure with Occlutech Figulla Device at Queen Alia Heart Institute
Awni Madani MD (Jordan)

17:10 - 17:20 83 — Total Cavo-Pulmonary Connection at Queen Alia Heart Institute: Thirteen Years Follow Up
Awni Madani MD (Jordan)

17:20 - 17:30 84 — Management of Patent Ductus Arteriosus at Queen Alia Heart institute: 3 Years Experience
Abdel-Fattah Abu-Haweleh MD (Jordan)

17:30 - 17:40 85 — Flexible Bronchoscopy Experience in Children with Upper Airway Obstruction
Muna Mokbel Dahabreh MD (Jordan)

17:40 - 17:50 86 — Unusual Presentation of Varicella Case Report
Khaled Amro MD (Jordan)

17:50 - 18:00 87 — Early Aggressive Intravenous Fat Emulsion Decreases the Incidence of Retinopathy of Prematurity
Ghassan S A. Salama MD, Neonatology (Jordan)

18:00 - 18:10 88 — Pattern and Outcome of Admissions to the Neonatal Unit at Prince Hashem Bin Al-Hussein Military Hospital
Najwa Sunna MD (Jordan)

18:10 - 18:20 89 — Antibiotic Resistance Pattern of Children with Urinary Tract Infection (UTI) at Prince Hashem Bin Al-Hussein Military Hospital
Nidal Younis MD (Jordan)

18:20 - 18:30 90 — Urinary Tract Infection among Neonatal Intensive Care Unit (NICU) graduates, is it a Hospital Acquired Infection?
Mohammad Khassawneh MD (Saudi Arabia)

Hall E
Petra Hall 2

09:00 - 11:00 - Session 1
Internal Medicine & Rheumatology
Moderators: Khaldoun Alawneh MD, Mousa Al-Hadidi MD, Marzouq Khair MD

09:00 - 09:25 91	RA and Atherosclerosis *Ali Jawad MD (UK)*
09:25 - 09:50 92	Hypereosinophilic Syndrome *Olivier Bletry MD (France)*
09:50 - 10:15 93	Relapsing Polychondritis *Ali Jawad MD (UK)*
10:15 - 10:40 94	Systemic Diseases and Thrombosis *Olivier Bletry MD (France)*
10:40 - 11:00	Discussion
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2
Internal Medicine & Rheumatology
Moderators: Hassan Naddaf MD, Wafa' Mdanat MD, Ala' Al-Heresh MD

11:30 - 11:55 95	Cystic Fibrosis Arthritis *Ali Jawad MD (UK)*
11:55 - 12:20 96	Antiphospholipid Syndrome and Pregnancy *Olivier Bletry MD (France)*
12:20 - 12:30 97	Lupus Nephritis at King Hussein Medical Center *Auasyalah Burgan MD (Jordan)*
12:30 - 12:40	Discussion

12:40 - 13:40 - Symposium 3
New Insights on Biologic Monotherapy
(Sponsored by Roche)
Rieke Alten (Germany)
Moderators: Dr Alaa Al Hersh, Dr Adel Wahadneh

13:40 - 14:30 Lunch Break

14:30 - 16:30 - Session 3
Pulmonology & Thoracic Surgery
Moderators: Firas Hawwari MD, Saeed Al-Fayoomi MD, Haitham Al-Khushman MD

14:30 - 14:50 98	Flail Chest Wall Stabilization *Michael Mueller MD (Austria)*
14:50 - 15:10 99	Interventional Diagnosis and Staging of Lung Cancer *Grigoris Stratakos MD (Greece)*
15:10 - 15:30 100	Sublobar Resection in the Treatment of Lung Cancer *Michael Mueller MD (Austria)*
15:30 - 15:50 101	Endoscopic Management of Post Intubation Tracheal Stenosis: An Update *Grigoris Stratakos MD (Greece)*
15:50 - 16:10 102	Lower Tracheal and Carinal Resection *Michael Mueller MD (Austria)*
16:10 - 16:30 103	Medical Thoracoscopy : A window to the Pleura *Grigoris Stratakos MD (Greece)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4
ENT
Moderators: Tariq Mahafza MD, Nawaf Abu-Jamous MD, Mohammad Hiari MD

17:00 - 17:10 104	Lund –Mackay Staging, Correlation between Computed Tomography Scan and Intraoperative Finding *Qais Aljfout MD (Jordan)*
17:10 - 17:20 105	Benign Lesions of the Vocal Cords: Prospective Study of 60 Cases *Mohammad Al-Rawashdeh MD (Jordan)*
17:20 - 17:30 106	Recurrent Respiratory Papillomatosis: our Experience at Queen Rania Al-Abdullah Hospital for Children at the Royal Medical Services *Eyad Safadi MD (Jordan)*
17:30 - 17:40 107	Imaging of Antrochoanal Polyposis *Sufian A. Roud MD (Jordan)*
17:40 - 17:50 108	Clinical Profile of Benign Laryngeal Lesions *Sufian Talat Alnawaiseh MD (Jordan)*
17:50 - 18:00 109	The Role of Nasal Endoscopy in Children Undergoing Adenoidectomy *Nemer Al-Khtoum MD (Jordan)*
18:00 - 18:30	Discussion

Hall F
Wadi Rum 1

09:00 - 11:00 - Session 1
Radiology
Moderators: Azmi Hadidi MD, Mohammed Hiari MD, Micheal Kakish MD

09:00 - 09:30 110	Imaging Hemorrhage, Aneurysms, and Vascular Malformations *Meng Law MD (USA)*
09:30 - 10:00 111	Imaging of Soft Tissue Tumors *Khalid Al Ismail MD (Saudi Arabia)*
10:00 - 10:30 112	Hepatobiliary Imaging *Conall Garvey MD (UK)*
10:30 - 11:00 113	Cystic Disease of the Pancreas *Conall Garvey MD (UK)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2
Radiology
Moderators: Nart Abedah MD, Mohammed Etawi MD, Sameeh Khlaifat MD

11:30 - 12:00 114	Imaging the Paranasal Sinuses *Meng Law MD (USA)*
12:00 - 12:30 115	The Role of CT in the Imaging of the Acute Abdomen *Conall Garvey MD (UK)*
12:30 - 13:00 116	MRI of Disc Diseases *Khalid Al Ismail MD (Saudi Arabia)*
13:00 - 13:30 117	MR Imaging of the Rotator Cuffs *Khalid Al Ismail MD (Saudi Arabia)*

13:30 - 14:30 - Symposium 4
Visionary MR Imaging Techniques
(Sponsored by GE Healthcare)
Paul Jamous (Lebanon)
Moderators: Adballah Jameel MD, Asem Hiari MD

14:30 - 16:30 - Session 3
Radiology
Moderators: Waleed Mahafzeh MD, Asem Mansour MD, Abdullah Jameel MD

14:30 - 15:00 118	Imaging in Alzheimers Disease *Meng Law MD (USA)*
15:00 - 15:30 119	Imaging White Matter Disorders *Meng Law MD (USA)*
15:30 - 15:45 120	Flow Siverters in the Treatment of Intracerebral Aneurysms *Hazem Habboub MD (Jordan)*
15:45 - 16:00 121	Palque Debulking (Atherectomy) in the Management of Critical Limb Ischemia *Hazem Habboub MD (Jordan)*
16:00 - 16:15 122	Case-Based Review of Breast Imaging in The Young Patient *Suha Ghoul MD (Jordan)*
16:15 - 16:30 123	Spectrum of CT Thorax Findings of Novel Pandemic Influenza A (H1N1) Infection in Oncology Patients *Suha Ghoul MD (Jordan)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4
Radiology
Moderators: Hazem Habboub MD, Imad Athamneh MD, Hussam Kaylani MD

17:00 - 17:10 124	Amyotrophic Lateral Sclerosis :Hyper Intensity of the Corticospinal Tracts on MR Images of the Brain: A Case Report *Micheal Kakish MD (Jordan)*
17:10 - 17:20 125	The Role of Magnetic Resonance Imaging in Diagnosing Common Disorders of the Knee: Our Experience at King Hussein Medical Center *Jameel Abdelhadi MD (Jordan)*
17:20 - 17:30 126	Incidental Findings Discovered during Coronary CTA at King Hussein Medical Center *Abdelhamid Aladwan MD (Jordan)*
17:30 - 17:40 127	Radiological Evaluation of 250 Cases of Primary Osteogenic Sarcoma: Our Experience at King Hussein Medical and Cancer Centers *Asem Al-Hiari MD (Jordan)*
17:40 - 17:50 128	Impact of Dual Time Point 18-FDG PET in the Assessment of FDG Avid Lesions in Patients with Suspected Cholangiocarcinoma *Khaled Alkhawaldeh MD (Jordan)*
17:50 - 18:00 129	Visualization of Normal Appendix during Non-Contrast Renal CT Scan at King Hussein Medical Center *Tareq Bisheh MD (Jordan)*
18:00 - 18:10 130	Endovascular Embolization of Angiomyolipoma: Our Experience at KHMC *Sizeph Haddad MD (Jordan)*
18:10 - 18:30	Discussion

Hall G
Wadi Rum 2

09:00 - 11:00 - Session 1
Plenary Session: Difficult Complications of Pregnancy
Moderators: Galb Al Taeb MD, Muafak Barakat MD, Mahmood Dabass MD

09:00 - 09:20 131	Hypothyroidism in Pregnancy *David James MD (UK)*
09:20 - 09:40 132	Thrombophilia and Pregnancy *Zarko Alfirevic MD (UK)*
09:40 - 10:00 133	Autoimmune Disease and Pregnancy *Mazen Zebdeh MD (Jordan)*
10:00 - 10:20 134	Heart Disease in Pregnancy *Wael Husami MD (USA)*
10:20 - 10:40 135	Breast Cancer and Pregnancy *David James MD (UK)*
10:40 - 11:00	Plenary Discussion
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2
Obstetrics & Gynecology
Moderators: Mazin Zebdeh MD, Abdirahman Al-Basheer MD, Mohammad Hiasat MD

11:30 - 11:50 136	Lateral Hysteroplasty Making the Impossible Possible *Mustapha Chaaban MD (Lebanon)*
11:50 - 12:10 137	Endometrial Cancer: Clinical Guidelines of Management *Adnan Hassan MD (Jordan)*
12:10 - 12:30 138	Hysteroscopy Challenges in Management of Infertility *Mustapha Chaaban MD (Lebanon)*
12:30 - 12:50 139	Gynecologic Cancers in Pregnancy: Guidelines of Management *Adnan Hassan MD (Jordan)*
12:50 - 13:10 140	Laparoscopic CO_2 LASER Treatment of Endometriomas *Mustapha Chaaban MD (Lebanon)*
13:10 - 13:30	Discussion

13:30 - 14:30 - Symposium 5
University of South Florida Health's Center for Advanced Medical Learning and Simulation (CAMLS) Symposium
(Sponsored by CAMLS LSI)
Judy Genshaft (USA)
Stephen Klasko (USA)
Deborah Sutherland (USA)
Moderators: Chip Diehl (USA), Aous Qutaishat (USA), Amer Amireh MD

14:30 - 16:30 - Session 3
Obstetrics & Gynecology
Moderators: Adnan Hassan MD, Nader Murad MD, Ziad Shrideh MD

14:30 - 14:50 141	Fetal Doppler and IUGR *Zarko Alfirevic MD (UK)*
14:50 - 15:10 142	Hypertension in Pregnancy *David James MD (UK)*
15:10 - 15:30 143	Modern management of PPH *Zarko Alfirevic MD (UK)*
15:30 - 15:40 144	Surgical Management of Placenta Accreta: A Three Years Experience at King Hussein Medical Center *Maher Maaita MD (Jordan)*
15:40 - 15:50 145	Prophylactic Balloon Occlusion of the Common Iliac Artery in a Patient with Complete Placenta Previa and Accrete: New Approach to Bleeding Control during Cesarean Hysterectomy, Case Report at King Hussein Medical Center *Vera Amarin MD (Jordan)*
15:50 - 16:00 146	Review of the Management and Outcome of Pregnant Women with Heart Disease at King Hussein Medical Center *Naser Al-Husban MD (Jordan)*
16:00 - 16:10 147	Perinatal Outcome in Idiopathic Polyhydramnios *Naser Malas MD (Jordan)*
16:10 - 16:20 148	Clinical and Histological Significance of Atypical Glandular Cells on Cervical Pap Smears *Ehab Al-Rayyan MD (Jordan)*
16:20 - 16:30	Discussion
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4
Obstetrics & Gynecology
Moderators: Mohammed Qudah MD, Walid Al-Naji MD, Maher Maaita MD

17:00 - 17:10 149	The Prevalence of Urinary Incontinence in Elderly Women living in Tafila - Jordan *Ahmad Alzubi MD (Jordan)*
17:10 - 17:20 150	Cabergoline versus Coasting in the Prevention of Ovarian Hyperstimulation Syndrome *Suhair O Wreikat MD (Jordan)*
17:20 - 17:30 151	The Impact of Combination of Therapeutic and Obstetric Pathology among Military Women During Pregnancy on the Sickness Rate of Children in the Period of Observation *N A Negrusha MD (Russian Federation)*
17:30 - 17:40 152	Rhinitis during Pregnancy : Risk Factors and Management *Mahmoud Mashagbeh MD (Jordan)*
17:40 - 17:50 153	Adverse Pregnancy Outcomes: Prevalence in Jordan *Tarek Athamneh MD (Jordan)*
17:50 - 18:00 154	Correlation between Pap Smear Testing and Wet Mount Results in Detecting Genital Infections *Mervat Sammour MD (Jordan)*
18:00 - 18:30	Discussion

Hall H
Mou'ta Lounge

09:00 - 11:00 - Session 1
ENT
Moderators: Munther Al-Labadi MD, Khaled Al-Qudah MD, Sami Jumean MD

09:00 - 09:20 155	In Chronic Sinusitis, Why Antibiotics Don't Work *David S Parsons MD (USA)*
09:20 - 09:40 156	Treatment of Nodal Metastases *K Thomas Robbins MD (USA)*
09:40 - 10:00 157	Management of Recurrent Laryngeal Nerve Injury *Gayle Woodson MD (USA)*
10:00 - 10:20 158	The Mini-FESS, an Extraordinarily Successful Method *David S Parsons MD (USA)*
10:20 - 10:40 159	Treatment of Larynx Cancer *K Thomas Robbins MD (USA)*
10:40 - 11:00 160	Management of Bilateral Laryngeal Paralysis *Gayle Woodson MD (USA)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2
ENT
Moderators: Firas Al-Zoubi MD, Ibrahim Al-Wedyan MD, Shawkat Al-Tamimi MD

11:30 - 11:50 161	Canal Wall up Mastoidectomy in Developing Countries *Michael McGee MD (USA)*
11:50 - 12:10 162	Surgical & Nonsurgical Management of Voice Problems *Gayle Woodson MD (USA)*
12:10 - 12:30 163	Ossicular Reconstruction Update *Michael McGee MD (USA)*
12:30 - 12:50 164	Evaluating the Complex Pediatric Airway *David S Parsons MD (USA)*
12:50 - 13:10 165	Organ Preservation Protocols for Head and Neck Cancer K Thomas Robbins MD (USA)
13:10 - 13:30 166	Early Cochlear Implant *Michael McGee MD (USA)*
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3
Physical Medicine & Rehabilitation
Moderators: Ziad Al-Zouby MD, Sameer Baniata MD, Ali Etoum MD

14:30 - 14:55 167	5-Years Experience of the Queen Rania Rehabilitation Centre Cologne *Eckhard Schoenau MD (Germany)*
14:55 - 15:15 168	Rehabilitation after Total Joint Replacement *Ziad Hawamdeh MD (Jordan)*
15:15 - 15:40 169	Mechanography - A New Device for the Assessment of Muscle Function in Pediatrics *Jörg Oliver Semler MD (Germany)*
15:40 - 16:00 170	Children with Congenital Limb Deficiency *Abdel-Fattah Al-Worikat MD (Jordan)*
16:00 - 16:10 171	The Clinical Outcome in Patients with Thoracic Outlet Syndrome after Trans-axillary Approach *Wael Al-Thunibat MD (Jordan)*
16:10 - 16:20 172	Characteristics of Elderly Postmenopausal Women with Falling Down *Naheyah Al-Muhtaseb MD (Jordan)*
16:20 - 16:30	Discussion
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4
Physical Medicine & Rehabilitation
Moderators: Khalil Hamed MD, Elias Huttar MD, Abdel-Fattah Al-Worikat MD

17:00 - 17:25 173	Spinal Injury: a Multi-System Disorder *Aheed Osman MD (UK)*

17:25 - 17:35 174 — Use of Serological Markers for the Evaluation of Patients with Rheumatoid Arthritis
Ali Al-Ghuweri MD (Jordan)

17:35 - 18:00 175 — Intrathecal Baclofen and it's Role in Managing Severe Spasticity
Aheed Osman MD (UK)

18:00 - 18:10 176 — The Use of Wedged Insoles inside the Shoes for Treatment of Patients with Mild to Moderate Knee Joint Pain due to Osteoarthritis and Narrowing Joint Spaces
Kareem Al-Rashdan MD (Jordan)

18:10 - 18:20 177 — The Relationship between Uric Acid and Triglyceride among Gouty Patients; Experience at Prince Hashem Bin Al-Hussein Military Hospital
Nael Al-Kurdi MD (Jordan)

18:20 - 18:30 — Discussion

Hall I
Harraneh Hall 1

09:00 - 11:00 - Session 1
WS32 Pharmacy Workshop 1:
Moderators: Prof Salah Abu Alruz, Pharm Mahasen Al- Hussien, Pharm Emad Al-Nsour

09:00 - 11:00 — Pharmaceutical Care / Medicines Management
Prof James C McElnay (UK)

11:00 - 11:30 — Coffee Break

11:30 - 13:30 - Session 2
WS33 Pharmacy Workshop 2:
Moderators: Dr Noor Obeidat, Pharm Hamzeh Al- Talafha, Pharm Omar Khalil

11:30 - 13:30 — Pharmacoeconomics: Measuring and Estimating Costs
Dr Qais Al-Efan (Jordan)

13:30 - 14:30 — Lunch Break

14:30 - 16:30 - Session 3
Allied Health Professions
Moderators: Dr. Jwan Al-Ebbeeni, Dr. Mohammed Al-Sakran, Brig. Dr. Basma Al-Khateeb

14:30 - 14:50 178 — Vestibular Rehabilitation
Alia Alghwiri PhD (Jordan)

14:50 - 15:00 179 — The Impact of Spinal Cord Injury on Recreational Activity
Zaid Hayajneh MSc Physiotherapy (Jordan)

15:00 - 15:10 180 — Frequently Asked Questions: Iodinated Contrast Agents
Kawther Aboanze, Radiotherapy Technician (Jordan)

15:10 - 15:20 181 — Comparison of the Versa TREK Blood Culture System Against The BACTEC MGIT 960 and Conventional Culture Method for the Detection of M. Tuberculosis
Ibrahim Jbara MSc Laboratory (Jordan)

15:20 - 15:30 182 — IS/IT Strategy for the Queen Rania Al-Abdullah Hospital for Children
Omar I Ayesh, Biomedical Engineering (Jordan)

15:30 - 15:40 183 — Spinal Deformity
Walid Dameh CPO Prosthetics & Orthotics (Jordan)

15:40 - 15:50 184 — Spectrum of Beta-Thalassemia and other Hemoglobinopathies over Six Years Experience at Princess Iman Research and Laboratory Sciences Center in Jordan
Heba Abu Alruz. MT BSc, Laboratory (Jordan)

15:50 - 16:00 185 — The Role of Teleradiology In the Royal Medical Services
Mohammad Saker Arabiat, Radiology Technician (Jordan)

16:00 - 16:10 186 — To Investigate the Relationship Between Hematocrit Values using Two Different Methods
Mohammed Al-Ghwairy MSc, Biomedical Engineering (Jordan)

16:10 - 16:20 187 — Wound Myiasis Caused by the Common Green Bottle Fly (Lucilia sericata): Case Report at the Royal Medical Services
Renad Al-Zou'bi, Laboratory Technician (Jordan)

16:20 - 16:30 188 — Statistical Analysis for UTI at KHMC During 2011
Muhammad Abu Setteh MSc Medical Lab Technician (Jordan)

16:30 - 17:00 — Coffee Break

17:00 - 18:30 - Session 4
Allied Health Professions
Moderators: Dr.Yousef Belto, Brig. Dr. Bassam Raja'e, Brig. Ellyan Al-Jboor

17:00 - 17:10 189 — Quality Assurance in Regional Hyperthermia Treatment (RHT) is Predictive for Treatment Outcome in Solid Tumors
S Abdel-Rahman, Biomedical Engineering (Germany)

17:10 - 17:20 190 — Patient Impression at Prince Hashim Bin Al-Hussein Military Hospital Radiology Department in Zarqa
Amal Moh'd Aldajeh, Radiology Technician (Jordan)

17:20 - 17:30 191 — Folic Acid Treatment of Hyperhomocysteinemia in Dialysis Patients
Ahmad Al-Marafi MSc Clin Biochem (Jordan)

17:30 - 17:40 192 — A Case Study on Multi Criterion Classification of Medical Devices at Prince Hamzeh Hospital
Mohammed Al-Rawashdeh, Biomedical Engineering (Jordan)

17:40 - 17:50 193 — The frequency of Acute Lymphoblastic Leukemia with Aberrant Myeloid Antigen Expression using Flow Cytometry: Experience at Princess Iman Research and Laboratory Sciences Center
Manal N Alabbadi BSc Laboratory (Jordan)

17:50 - 18:00 194 — The Advantages and Disadvantages for Oxygen Liquid Tank & PSA Pressure Swing Adsorption Systems
Saleh A Al-Saidat, Biomedical Engineering (Jordan)

18:00 - 18:10 195 — Does the Children's Temperature Measurement Vary according to the Type of Thermometer Device used or the Position in which the Probe of the Digital Thermometer is Placed?
Saleh A Al-Saidat, Dip, Biomedical Technician (Jordan)

18:10 - 18:20 196 — The Outcomes of wheelchair Description and Seating for Spinal Cord Injury Patients at Royal Rehabilitation Center: A Preliminary Report
Marwan Abu Rumman, Occupational Therapy (Jordan)

18:20 - 18:30 197 — Comparison between Creatine Kinase-MB (CK-MB) and Cardiac Troponin I (cTnI) to diagnose Acute Myocardial Infarction (AMI) in Coronary Care Unit (CCU) at Queen Alia Heart Institute (QAHI)
Mohammad Ahmad Alsmadi, Medical Lab Technician (Jordan)

18:30 - 18:40 198 — Evaluation Between Hot Wire and Differential Pressure Flow Sensors in ICU Ventilators at King Hussein Medical Center
Saqer Alsmade, Biomedical Technician (Jordan)

Hall J
Harraneh Hall 5

09:00 - 11:00 - Session 1
Dentistry: Orthodontics, Pedodontics, Periodontics, Conservative Dentistry
Moderators: Dr Aref Al Momani, Dr Tal'at Iskandar, Dr Manhal Al Rashdan

09:00 - 09:10 199 — Mean Age and Chief Complaint of Jordanian Children on their First Dental Visit
Ayman Al Olaimat BDS, Pedodontics (Jordan)

09:10 - 09:20 200 — Frequency of Primary Tooth Injury at Prince Rashid Bin Al-Hassan Military Hospital
Eman Hussein Hammouri DDS, Pedodontics (Jordan)

09:20 - 09:30 201 — Patients' Attitude toward Using Gloves by General Dental Practitioners
Basma K. Al-Sakarna BDS, Pedodontics (Jordan)

09:30 - 09:40 202 — The Awareness of Parents of the Time of Eruption of Permanent First Molar and the Prevalence of Caries in this Tooth
Moa'th Ghozlan BDS, Pedodontics (Jordan)

09:40 - 09:50 203 — Oral Health Knowledge, Attitudes and Behavior of Nursing Students at Mutah University
Sarah Saad Alsrour BDS, Periodontics (Jordan)

09:50 - 10:00 204 — Prevalence of Tongue Coating in Dental Clinics at the Royal Medical Services
Musab A. Alarabeyat BDS, Periodontology (Jordan)

10:00 - 10:10 205 — Oral Hygiene and Oral Health Knowledge among 12-15 Year-Old Schoolchildren in Al-Karak - Jordan
Mohammad Al-Qudah BDS, Periodontics (Jordan)

10:10 - 10:20 206 — Differences in Mandibular Parameters among Dentate Subjects using Digital Panoramic Radiography
Raghda Al-Shamout BDS, Orthodontics (Jordan)

10:20 - 10:30 207 — Orthodontic Management of the Medically Compromised Patient
Zaid Hassan AL-Zou'bi BDS, Orthodontics (Jordan)

10:30 - 10:40 208 — Prevalence of New Carious Lesions in Patients Undergoing Orthodontic Treatment with Fixed Appliances
Nader Alfred Masarwa BDS, Conservative Dentistry (Jordan)

10:40 - 10:50 209 — Success Rate of Inferior Alveolar Nerve Block Analgesia
Jehad A. Ajarmah BDS, Conservative Dentistry (Jordan)

10:50 - 11:00 210 — Dental Anxiety and its Possible Effects on Caries Prevalence among Jordanian Adults
Hazem Khraisat BDS Periodontics (Jordan)

11:00 - 11:30 — Coffee Break

11:30 - 13:30 - Session 2
Dentistry: Maxillo-Facial Surgery, Prosthodontics
Moderators: Dr Awni Al Rihani, Dr Rawhi Rashid,Dr Hani Telfah

11:30 - 11:40 211 — Sinus Lift: Our Experience at King Hussein Medical Center
Zuhair Muhaidat DDS, Oral & Maxillofacial Surgery (Jordan)

11:40 - 11:50 212 — Photodynamic Therapy: The Broad Spectrum Killer
Mohammed Al Khawalde BDS, Oral & Maxillofacial Surgery (Jordan)

11:50 - 12:00 213 — The Prevalence of Carotid Artery Calcification on the Panoramic Radiographs in Jordanian Population
Majed Hani Khreisat BDS Oral & Maxillofacial Surgery (Jordan)

12:00 - 12:10 214 — Prevalence of Torus Palatinus and Torus Mandibularis in Jordanian Population
Mashhor Al-Wreikat BDS, Oral & Maxillofacial Surgery (Jordan)

12:10 - 12:20 215 — Facial Trauma: Our Experience at Princess Haya Al-Hussein Military Hospital in Aqaba
Zaid Rasheed Al Zubi BDS, Oral & Maxillofacial Surgery (Jordan)

12:20 - 12:30 216 — Prophylactic Immediate Packing with Solcoseryl Dental Adhesive Paste for the Prevention of Alveolar Osteitis
Hytham Al-Rabadi BDS, Oral & Maxillofacial Surgery (Jordan)

12:30 - 12:40 217 — The Accuracy of Fine Needle Aspiration Cytology in the Diagnosis of Neck Masses other than Thyroid
Ahmad Ali Al-Share' BDS, Oral & Maxillofacial Surgery (Jordan)

12:40 - 12:50 218 — Mandibular Overdenture Supported by Two Implants. A Prospective Comparative Preliminary Study: One Year Results
Gadeer Mukatash Nimri BDS, Prosthodontics (Jordan)

12:50 - 13:00 219 — Temporo-Mandibular Disorder Features in Complete Denture Patients versus Patients with Natural Teeth: A Comparative Study
Yousef R. Al-Shumailan BDS, Prosthodontics (Jordan)

13:00 - 13:10 220 — Association between Length of Time of Denture Wearing and the Reduction of Mandibular Residual Ridge in Completely Edentulous Patients Wearing Complete Dentures
Osama Al-Jabrah BDS, Prosthodontics (Jordan)

13:10 - 13:30 — Discussion

13:30 - 14:30 — Lunch Break

14:30 - 16:30 - Session 3
Nursing
Moderators: Dr. Manar Al Nabulsi, Retired Brig. Gen. Ahmad Almomani, Brig. Gen. Reema Al-Habashneh

14:30 - 14:50 221 — Critical Care Outreach - The Benefits
Carmel Gordon RN (United Kingdom)

14:50 - 15:00 222 — Jordanian Women's Lived Experience of Infertility
Adlah Hamlan RN MSc (Jordan)

15:00 - 15:10 223 — Nurses' Ability to Detect and Document Medication Prescribing Errors: A Comparative Study between Accredited and Non-Accredited Hospitals in Jordan
Bushra Al-Ayed PhD (Jordan)

15:10 - 15:20 224 — The Influence of Demographics and Previous Screening Practices on Intention to Perform Mammography among Women in Jordan
Areej Othman RN PhD (Jordan)

15:20 - 15:30 225 — Psychological Distress and Perceived Support among Jordanian Parents Living with a Child with Cerebral Palsy: A Cross Sectional Study
Ekhlas Al Gamal RN PhD (Jordan)

15:30 - 15:40 226 — The Effect of Mentorship Orientation Program on Teaching Self-Efficacy of New Nurse Faculty
Nuha Remon RN (Jordan)

15:40 - 15:50 227 — Predictors of Dietary and Fluid Non-Adherence in Jordanian Patients with End-Stage Renal Disease Receiving Hemodialysis: A Cross-Sectional Study
Amani Anwar Khalil RN PhD (Jordan)

15:50 - 16:00 228 — Knowledge and Practice of Foot Care among Patients Seeking Diabetes Treatment at King Hussein Medical Center
Reem Moh'd Al-Qaddah RN MSc (Jordan)

16:00 - 16:10 229 — Nurse Job Satisfaction and Retention among Different Health Care Units in Jordan: A Case Study of Islamic Hospital
Amneh Abu Haweeleh RN (Jordan)

16:10 - 16:20 230 — Postpartum Practices among Jordanian Women at King Hussein Medical Center
Oraib Altaweel RN MSc (Jordan)

16:20 - 16:30 231 — Factors Influencing Students' Attitudes towards Midwifery Profession in Jordan: Tool Validation
Omymah Al-Rajaby RN (Jordan)

16:30 - 17:00 — Coffee Break

17:00 - 18:30 - Session 4
Nursing
Moderators: Dr. Mohammad Almomani, Retired General Rowyda Salameh, Brig. Gen. Nouf Albadawi,

17:00 - 17:10 232 — The Effect of Infant Massage on Preterm Infant: A Systematic Review
Ruba Al Ajarmeh RN MSc (Jordan)

17:10 - 17:20 233 — The Attitudes of Emergency Doctors and Nurses towards Family Presence During CPR in Queen Alia Military Hospital
Haytham Alabade RN/Paramedic (Jordan)

17:20 - 17:30 234 — Nursing Documentation in Mental Health Setting
Bassema Abufarsakh RN (Jordan)

17:30 - 17:40 235 — Impact of Smoking on Peripheral Oxygen Saturation during Induction of General Anesthesia
Kafa Al-Quissi RN (Jordan)

17:40 - 17:50 236 — Knowledge about the Use of Contact Lenses and Their Care among Patients who Attend the Ophthalmology Clinics at King Hussein Medical Center
Eman Samawe RN (Jordan)

17:50 - 18:00 237 — Achieving Total Quality Management by Using Accreditation Standards at Queen Rania Al-Abdullah Children's Hospital: A Comparative Study between Staff and Patient Views
Wafa Nail Karadsheh RN MSc (Jordan)

18:00 - 18:10 238 — Assessment of the Factors of Chronic Pain in Hemodialysis Patients at King Hussein Hospital
Ahmad Al-Omari RN (Jordan)

18:10 - 18:20 239 — The Impact of SBAR Communication Protocol on Nurse's Perception of Patient Outcomes at Queen Rania Al-Abdullah Children's Hospital
Lubna Kildani RN (Jordan)

18:20 - 18:30 240 — Effect of Breast Cancer Orientation Program on the Commitment to Breast Self Examination
Manal Fawaz RN MSc (Jordan)

Hall K
Harraneh Hall 6

12:00 - 13:00 - Symposium 6
Global Development of Biosimilar Products
(Sponsored by Hikma Pharmaceuticals)
Stanley (Seung Suh) Hong PhD (Korea)
Moderators: Ahmad Telfah MD, Raid Marji MD

13:30 - 14:30 — Lunch Break (Sponsored by Hikma Pharmaceuticals)

14:30 - 16:30 - Session 3
Allied Health Professions
Moderators: Retired Brig Gen Basema Al-Jaabari, Brig. Gen. Saleh Malkawi, Col. Mohammad Mustafa

14:30 - 14:50 241 — Malnutrition Screening: An Analysis of the Evidence
Annalynn Skipper (USA)

14:50 - 15:00 242 — The Effect of the Amount of Olive Oil Consumed Daily at Al-Ashrafeih North Jordan on Obesity
Mohammad Mustafa Aqel, Nut. Eng. (Jordan)

15:00 - 15:20 243 — Medical Nutrition Therapy in Hospitals and Healthcare
Annalynn Skipper (USA)

15:20 - 15:30 244 — The Effect of Food Sale Promotion on Unhealthy Dietary Choices for Consumers
Feras Saleh Bani Salameh, Nut. Eng. (Jordan)

15:30 - 15:50 245 — New Strategy of Hospital Admission and Discharge in Light of Economical Crisis
Yousef R.A. Shehada, Quality Improvement Director (Gaza Strip)

15:50 - 16:00 246 — Psychological, Educational & Social Consequences of Dialysis on Children and their Parents at Queen Rania Al-Abdullah Hospital for Children
Fayha Nofan Mryan, Sociology (Jordan)

16:00 - 16:30 — Discussion

16:30 - 17:00 — Coffee Break

17:00 - 18:30 - Symposium 7
Implementation of the Agility 160 leaf MLC – Initial Experience of its Clinical Advantage
(Sponsored by Al Faisaliah Healthcare Systems Co.)
Chris Walker MD (UK)
Moderators: Sameer Khraisat MD, Belal Hiari MD

Hall A1
Dead Sea Hall 1

09:00 - 11:00 - Session 1
Plenary Session: Breast Cancer Update
Moderators: Hikmat Abdelrazaq MD, Rami Yagan MD, Jamal Masaad MD, Ali Abousini MD

09:00 - 09:20 247 — Stereotactic Technique in Breast Pathology
Amal Smadi MD, Radiology (Jordan)

09:20 - 09:40 248 — Narrow or Wide Margin after Breast Conserving Surgery in Breast Cancer
Ali Abuseini MD, Breast Surgery (Jordan)

09:40 - 10:00 249 — Extending the Role of Breast Conservation
Fiona MacNeill MD, Breast Surgery (UK)

10:00 - 10:20 250 — Immediate vs. Delayed Breast Reconstruction after Mastectomy
Samher Weshah MD, Plastic & Reconstructive Surgery (Jordan)

10:20 - 10:40 251 — Triple Negative Breast Cancer Treatment
Ahmed Othman MD, Oncology (Jordan)

10:40 - 11:00 252 — Accelerated Partial Breast Irradiation: Current Practice and Future Prospects in Jordan
Abdulmajeed Dayyat MD, Radiotherapist (Jordan)

11:00 - 11:30 — Coffee Break

11:30 - 13:30 - Session 2
Urology
Moderators: Mamoun Zibdeh MD, Faisal Mousa Dawod MD, Zahran Budair MD

11:30 - 11:50 253 — Management of Organ Confined Prostate Cancer: Radical Prostatectomy and Management of its Complications
Manfred Wirth MD (Germany)

11:50 - 12:10 254 — Renal Cell Carcinoma: Clinicopathological Spectrum in the Past 20 Years
Ibrahim Banihani MD (Jordan)

12:10 - 12:30 255 — Update on flexible Ureterorenoscopy
Thomas Knoll MD (Germany)

12:30 - 12:50 256	Nephron-Sparing Surgery *Manfred Wirth MD (Germany)*
12:50 - 13:00 257	The Pathological Spectrum of Testicular Tumors at King Hussein Medical Center *Ahlam Awamleh MD (Jordan)*
13:00 - 13:10 258	Allograft Nephrectomy Following Kidney Transplantation: Preliminary Experience with Pre-Operative Angiographic Kidney Embolization *Samer Al-Geizawi MD (Jordan)*
13:10 - 13:20 259	Memokath Intraprostatic Stent: Outcome in High Risk Patients with Bladder Outlet Obstruction at King Abdul-Aziz National Guard Hospital, Al-Hasa - K.S.A Bin Ajjaj A MD (Saudi Arabia)
13:20 - 13:30 260	Intravesical Intramuscular Botulinumtoxin-A-Injection (IIB-A-I) in Patients with Neurogenic Detrusor Overactivity: 8 Years of Application Awad Al-Kaabneh MD (Jordan)
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

Breast Surgery

Moderators: Basheer Bani Mustafa MD, Fayez Al- Dawood MD, Asaad Ghazal MD, Ali El-Ebous MD

14:30 - 14:55 261	Oncoplastic Breast Surgery: a Philosophy of Care *Fiona MacNeill MD, Breast Surgery (UK)*
14:55 - 15:10 262	Surgical Techniques in Oncoplastic Breast Surgery: Our Experience at the Royal Medical Services *Ali Abuseini MD (Jordan)*
15:10 - 15:35 263	Take them both off: the Rise in Bilateral Mastectomies *Fiona MacNeill MD, Breast Surgery (UK)*
15:35 - 16:00 264	Post Z11: More Axillary Controversies *Fiona MacNeill MD, Breast Surgery (UK)*
16:00 - 16:10 265	Biological Features of Breast Carcinoma in Postmenopausal Women *Hani M Al-Kafaween MD (Jordan)*
16:10 - 16:30	Discussion
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Nephrology

Moderators: Riyad Saeed MD, Nabeel Akash MD, Ibraheem Al-Smadi MD

17:00 - 17:20 266	Chronic Kidney Disease: Management by Stages *Martin Kuhlmann MD (Germany)*
17:20 - 17:40 267	Patient Empowerment in the Management of Hyperphosphatemia in Dialysis Patients *Martin Kuhlmann MD (Germany)*
17:40 - 18:05 268	Resistant Hypertension: New Treatment Strategies *Martin Kuhlmann MD (Germany)*
18:05 - 18:15 269	Kidney Transplantation at King Hussein Medical Center: Medical Complications and Outcome *Ayham Haddad MD (Jordan)*
18:15 - 18:30	Discussion

Hall A2

Dead Sea Hall 2

09:00 - 11:00 - Session 1

Plenary Session: Dentistry 1

Prosthodontics, Periodontics, Maxillo-Facial Surgery, Conservative Dentistry, Orthodontics

Moderators: Dr Yassin Al Husban, Dr Jasser Al Maaitah, Dr Safwan Al Khasawneh

09:00 - 09:30 270	Location Location Location. Where to Plan to Plant your Implant to Get the Best Return on Your Clients Investment? The Aesthetic Zone ! *Dr Rajesh Patel, Implantology (UK)*
09:30 - 10:00 271	The Divide and Rule Principle in Complex Treatment Planning for the Rehabilitation of the Failing Dentition: An Organisational and Logistic Approach using Implants *Dr Rajesh Patel, Implantology (UK)*
10:00 - 10:30 272	Surgical Approaches to Manage Aesthetic Failures and to Improve Gingival Harmony *Dr Rajesh Patel, Implantology (UK)*
10:30 - 10:40 273	Peripheral Neurectomy for the Management of Trigeminal Neuralgia *Medyan Al-Rousan BDS, Oral & Maxillofacial Surgery (Jordan)*
10:40 - 10:50 274	Periodontal Treatment Needs and Oral Ulceration in Children and Adolescents with Celiac Disease *Reem Dababneh DDS, Periodontics (Jordan)*
10:50 - 11:00 275	Orthognathic Surgical Midline Closure in a Periodontally Compromised Case *Amjad Warawreh BDS, Orthodontics (Jordan)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Plenary Session: Dentistry 2

Endodontics, Conservative Dentistry

Moderators: Dr Ibrahim Abu Tahoun, Dr Ghazi Baka'in, Dr Sami Jebrin

11:30 - 13:00 276	Post-Treatment Endodontic Disease and Re-Treatment - Biological Sciences *Prof Paul Dummer, Endodontics (UK)*
13:00 - 13:10 277	Proper Use of Antibiotics in Dental Practice *Moeen Al Weshah BDS, Endodontics (Jordan)*
13:10 - 13:20 278	The Effect of Full Strength Sodium Hypochlorite on Determination of Working Length in Canals of Anterior Teeth Measured by Apex Locator DSP (In Vivo Study) *Maha Al-Ahmed BDS, Conservative Dentistry (Jordan)*
13:20 - 13:30 279	White versus Grey MTA: Systematic Review *Mohammed Omosh BDS, Conservative Dentistry (Jordan)*
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

Plenary Session: Dentistry 3

Pedodontics, Orthodontics

Moderators: Dr Ilham Abu Al Haija', Dr Riyad Al Batikhi, Dr Ahmad Zawahreh

14:30 - 15:00 280	A Review of Paediatric Dental Trauma *Prof Richard Widmer, Pedodontics (Australia)*
15:00 - 15:30 281	Common Oral Pathology: The Medical/Dental Interface *Prof Richard Widmer, Pedodontics (Australia)*
15:30 - 16:00 282	Relationships in Dental Practice: Caring for Children in the Dental Environment *Prof Richard Widmer, Pedodontics (Australia)*
16:00 - 16:10 283	The Use of Midazolam as Oral Sedation in Pediatric Dentistry *Maan Alfar BDS, Pediatric Dentistry (Jordan)*
16:10 - 16:20 284	Failure of Eruption of Primary Maxillary Central Incisor *Karam Abu Shakra BDS, Pediatric Dentistry (Jordan)*
16:20 - 16:30 285	Pain Perception in Patients Treated by Fixed Orthodontic Appliances and its Effect on their "Quality of Life" *Mohammed Odeh Al-Ma'ani BDS, Orthodontics (Jordan)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Plenary Session: Dentistry 4

Prosthodontics, Conservative Dentistry, Periodontics

Moderators: Dr Kifah Al Jam'ani, Dr Falak Al Jam'ani, Dr Mohammad Al Omari

17:00 - 17:40 286	All-Ceramic Restorations: Choosing and Using the Right Material *Dr Esam Alem, Prosthodontics (Jordan)*
17:40 - 17:50 287	Evaluating the Relative Optical Translucency of Four Opaque and Composite Resins *Abeer Salem Al-Khreisat BDS, Conservative Dentistry (Jordan)*
17:50 - 18:00 288	Perception of Jordanian Population to Altered Dental Aesthetics via Composite Resin Restorations *Waddah El-Naji BDS, Restorative Dentistry (Jordan)*
18:00 - 18:10 289	Anti-Bacterial Effect of Octenaidol 0.1% Mouth Wash on Streptococcus Salivarius Biofilm: Comparison of Two Laboratory Methods *Derar Mustafa Al-Sebaie, Dental Prosthesis Specialist (Jordan)*
18:10 - 18:30	Discussion

Hall B

Mount Nebo Hall 1

09:00 - 11:00 - Session 1

Plenary Session: Osteoporosis

Moderators: Mahmoud Odat MD, Mofak Barakat MD, Ali Otom MD

09:00 - 09:20 290	Role of DEXA Scan in the Diagnosis of Osteoporosis *Hussam Kaylani MD, Nuclear Medicine and Radiology (Jordan)*
09:20 - 09:40 291	The Muscle-Bone-Unit: A Functional Approach in Childhood Osteoporosis *Eckhard Schoenau MD, Rehabilitation and Rheumatology (Germany)*
09:40 - 10:00 292	Estrogen Deficiency and Osteoporosis *David James MD, Gynecology (UK)*
10:00 - 10:20 293	Update in Medical Management of Osteoporosis *Ali H. Otom MD, Rehabilitation and Rheumatology (Jordan)*
10:20 - 10:40 294	Surgical Treatment of Osteoporotic Fractures *Peter V. Giannoudis MD, Orthopedic Surgery (UK)*
10:40 - 11:00	Plenary Discussion
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Orthopedic Surgery

Trauma, Tumor and Complications

Moderators: Mahmoud Ababneh MD, Nabil Atallah MD, Issa Sawaged MD

11:30 - 11:50 295	Treatment of Recalcitrant Long Bone Non-Unions and Bone Defects: Application and Clinical Results of the Diamond Concept *Peter V. Giannoudis MD, Orthopedic Surgery (UK)*
11:50 - 12:00 296	Correct Screw Positioning in MIS Trauma Stabilization *Arnold J Suda MD (Germany)*
12:00 - 12:20 297	Pelvic Fracture Overview *Said Abdul Majeed MD (Jordan)*
12:20 - 12:30 298	Surgical Intervention of Pelvic & Acetabular Fractures *Hazem Al-Magableh MD (Jordan)*
12:30 - 12:40 299	Pelvic Ring and Acetabular Fractures *Ahmed Abuhazeem MD (Jordan)*
12:40 - 12:50 300	Development of Orthopedic Tumor and Reconstruction Surgery over the Past Twenty Seven Years at King Hussein Medical Center *Ghaith Abou-Nouar MD (Jordan)*

12:50 - 13:00 301	Limb Salvage Surgery for Bone Tumors around the Knee, the Oncologic and Functional Outcome: King Hussein Medical Center Experience *Raed Al-Zaben MD (Jordan)*
13:00 - 13:20 302	Vertebral Osteomyelitis: Means of Diagnosis & Methods of Treatment *Jamal Wadi Al-Ramahi MD (Jordan)*
13:20 - 13:40 303	Treatment of Bone Defects using the Induced Membrane Technique *Peter V. Giannoudis MD, Orthopedic Surgery (UK)*
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

Orthopedic Surgery

Pediatrics & Arthroplasty

Moderators: Jehad Ajlouni MD, Mohamed Al Thaher MD, Mohamed Dwairi MD

14:30 - 14:50 304	Orthopedic Recognition of Child Abuse: The Jordanian Experience *Mahmoud Odat MD (Jordan)*
14:50 - 15:00 305	Congenital Insensitivity to Pain and Anhidrosis (CIPA): Is there a Role for Orthopedic Surgeon *Ahmed Almarzouq MD (Jordan)*
15:00 - 15:10 306	Functional Evaluation of Children with Obstetrical Brachial Plexus Palsy (OBPP) after Latissimus Dorsi Muscle Transfer and Subscapularis Muscle Release *Razi Tarawneh MD (Jordan)*
15:10 - 15:20 307	Open Reduction though Medial Approach in Developmental Dysplasia of the Hip: Short Term Follow-Up *Firas Al-Ibrahim MD (Jordan)*
15:20 - 15:30 308	Royal Medical Service Experience in using Taylor Spatial Frame *Fadi Al-Rousan MD (Jordan)*
15:30 - 15:50 309	Periprosthetic Infections *Jihad Ajlouni MD (Jordan)*
15:50 - 16:00 310	Vastus Lateralis Muscle Flap for Infected Hips after Resection Arthroplasty *Arnold J Suda MD (Germany)*
16:00 - 16:10 311	Elective Aseptic Orthopaedic Implant Removal - Increased Risk for Infection? A Study of 1545 Patients *Arnold J Suda MD (Germany)*
16:10 - 16:20 312	The Accuracy of Robotic Surgery in Unilateral Medial Compartment Knee Replacement *Muthana Al-Rayyan, MD (Jordan)*
16:20 - 16:30 313	Knee Arthroscopy under Local Anesthesia *Malek Ghnaimat MD (Jordan)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Orthopedic Surgery

Hand & Upper Limb

Moderators: Shaher Hadidi MD, Monther Saoudi MD, Issam Dahabra MD

17:00 - 17:20 314	Advances in Hand and Wrist Arthroscopy *Alejandro Badia MD (USA)*
17:20 - 17:30 315	Volar Dome Osteotomy for Correction of Madelung's Deformity: Experience at King Hussein Medical Center *Issam Dahabra MD (Jordan)*
17:30 - 17:50 316	Athletic Injuries in the Hand and Wrist *Alejandro Badia MD (USA)*
17:50 - 18:00 317	Capitate Shortening in the Treatment of Kienböck's Disease *Ayman Mustafa MD (Jordan)*
18:00 - 18:20 318	Endoscopic Carpal and Cubital Tunnel surgery *Alejandro Badia MD (USA)*
18:20 - 18:30 319	Current Concept in the Management of Peripheral Nerve Injuries *Firas Al-Ibrahim MD (Jordan)*

Hall C

Mount Nebo Hall 2

09:00 - 11:00 - Session 1

Cardiac & Vascular Surgery

Moderators: Walid Masoud MD, Laith Abu Nowar MD, Faeq Hadadin MD

09:00 - 09:20 320	A Pilot, Randomised Trial of Conventional Prolene Anastomosis Versus U Clip Anastomosis for Arteriovenous Fistula. *Stuart R Walker MD (Australia)*
09:20 - 09:30 321	Eleven Years Experience with the use of Contegra® *Yousef Zureikat MD (Jordan)*
09:30 - 09:50 322	A Randomised Trial of Betadine Wound Irrigation in Varicose Veins Surgery *Stuart R Walker MD (Australia)*
09:50 - 10:00 323	Waterpipe Smoking: New Trend in Peripheral Vascular Disease Patients *Mamoun Al-Basheer MD (Jordan)*
10:00 - 10:20 324	Is Heparin Required for Lower Limb Endovascular Intervention? *Stuart R Walker MD (Australia)*
10:20 - 10:30 325	Anomalous Origin of the Coronary Arteries: The Mayo Clinic Experience *Salah-Eldien Altarabsheh MD (Jordan)*
10:30 - 10:40 326	Trans-Rectus Transverse Mini-Laparotomy Aortic Surgery: Report of the First 6 Cases *Mamoun Al-Basheer MD (Jordan)*
10:40 - 10:50 327	Results of Tricuspid Valve Repair at Queen Alia Heart Institute: De-Vaga Repair vs. Ring Annuloplasty, Which is Better? *Haitham Altaani MD (Jordan)*
10:50 - 11:00	Discussion
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Cardiology

Moderators: Akram Al-Saleh MD, Marwan Al-Nimri MD, Yahya Al-Badayneh MD

11:30 - 11:55 328	Retrograde Techniques in Chronic Total Occlusion Recanalization *Alfredo Galassi MD (Italy)*
11:55 - 12:20 329	Essentials from the Euro-CTO Club: Update and Preview *Alfredo Galassi MD (Italy)*
12:20 - 12:45 330	A Step-by-Step Case Based Tutorial of the Spectrum of Dual Stent Bifurcation Techniques, and How to Choose *Alfredo Galassi MD (Italy)*
12:45 - 13:00	Discussion
13:00 - 13:15 331	Antegrade Techniques for Recanalizing Chronic Total Coronary Occlusions at Queen Alia Heart Institute *Abdallah Omeish MD (Jordan)*
13:15 - 13:30 332	Experience with Transradial Sheathless Guiding Catheters at Queen Alia Heart Institute Initial Experience in Jordan *Abdallah Omeish MD (Jordan)*
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

Cardiology

Moderators: Medhat Al-Bakri MD, Aziz Al-Saket MD, Abdallah Omeish MD

14:30 - 15:00 333	Non-Cardiac Surgery after Stenting: When it will be Appropriate? *Wael Husami MD (USA)*
15:00 - 15:20 334	A Prospective Cohort Study on the Use of Transradial Approach at Queen Alia Heart Institute *Abdallah Omeish MD (Jordan)*
15:20 - 15:40 335	Trans-Catheter Sympathetic Renal Denervation: Early Experience at Queen Alia Heart Institute and Brief Review *Marwan Nimri MD (Jordan)*
15:40 - 16:10 336	Venous Thromboembolism Management & The Role of Endovascular Therapy *Wael Husami MD (USA)*
16:10 - 16:30 337	Vasculo-Behcet and the Role of Coronary Grafted Stents *Abdallah Omeish MD (Jordan)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Endocrine

Moderators: Husni Sadeq MD, Fares Haddad MD

17:00 - 17:30 338	You and Your Body: Body Clocks, Diabetes and Heart Disease *Eleanor M Scott MD (UK)*
17:30 - 18:00 339	Poly Cystic Ovarian Syndrome: Relevance to a Physician *Paul E. Jennings MD (UK)*
18:00 - 18:10 340	Pituitary Metastasis of Follicular Thyroid Carcinoma, Case Report and Review of the Literature *Abdallah Abdelaziz Aleyadeh MD (Jordan)*
18:10 - 18:30	Discussion

Hall D

Petra Hall 1

09:00 - 11:00 - Session 1

Intensive Care

Moderators: Tagreed Al-Najjar MD, Mamoun Al-Zuhluf MD, Hussein Al-Shalan MD

09:00 - 09:40 341	Intra-Hospital Transport of Critically Ill Patients: Minimizing The Risk *Ayman O. Soubani MD (USA)*
09:40 - 10:20 342	Weaning from Mechanical Ventilation *Ayman O. Soubani MD (USA)*
10:20 - 10:30 343	Percutaneous Dilatational Tracheostomy *Qasim Khamaiseh MD (Jordan)*
10:30 - 11:00	Discussion
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Ophthalmology

Moderators: Ahmad Hassouneh MD, Wa'el Abu Laban MD, Reham Sha'ban MD

11:30 - 11:55 344	Progress in the Management of Age Related Macular Degeneration (ARMD) *Salwan Rassam MD (UK)*
12:55 - 12:20 345	Management of Macular Hole *Ayman Mdanat MD (Jordan)*
12:20 - 12:45 346	Management of Advanced Diabetic Eye Disease *Salwan Rassam MD (UK)*
12:45 - 12:55 347	Cyclodiode Laser Treatment in Glaucoma, Experience at King Hussein Medical Center *Mohannad Al-Bdour MD (Jordan)*

12:55 - 13:20 348	New Approach to the Management of Suprachoroidal Haemorrhage *Salwan Rassam MD (UK)*
13:20 - 13:30	Discussion
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

Ophthalmology

Moderators: Sameer Al Mulqi MD, Samer Kharma MD, Janet Hina MD,

14:30 - 14:55 349	MS and Non-MS Optic Neuritis *Gordon T. Plant MD (UK)*
14:55 - 15:05 350	Idiopathic Intracranial Hypertension in Adults at King Hussein Medical Center: Presentation and Management *Suha Al-Eajailat MD (Jordan)*
15:05 - 15:15 351	Therapeutic Approach to Functional Outflow Obstruction of the Lacrimal Drainage System *Thabit Odat MD (Jordan)*
15:15 - 15:40 352	Rehabilitation of Homonymous Hemianopia *Gordon T. Plant MD (UK)*
15:40 - 15:50 353	Posner-Schlossman Syndrome : A Case Report *Ahmed Khatatbeh MD (Jordan)*
15:50 - 16:10 354	Bedside Evaluation of Neurological Eye Movement Disorders *Gordon T. Plant MD (UK)*
16:10 - 16:20 355	Efficacy of Subconjunctival Bevacizumab in Pterygium Management *Mohammad Al-Droos MD (Jordan)*
16:20 - 16:30	Discussion
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Ophthalmology

Moderators: Mu'aweyah Al Bdoor MD, Sami Da'san MD, Issam Batayneh MD

17:00 - 17:25 356	The World of Keratoprostheses *Christopher Liu MD (UK)*
17:25 - 17:35 357	Management of High Post-Penetrating Keratoplasty Astigmatism at King Hussein Medical Center *Wafa Asfour MD (Jordan)*
17:35 - 18:00 358	Cataract Surgery Master Class *Christopher Liu MD (UK)*
18:00 - 18:10 359	The Outcome of the First 1000 Case of Lasik Performed at King Hussein Medical Center *Wajih Abdallat MD (Jordan)*
18:10 - 18:20 360	Phototherapeutic Keratectomy (PTK) for Treatment of Corneal Disease: Our Experience at King Hussein Medical Center *Nancy Al Raqqad MD (Jordan)*
18:20 - 18:30	Discussion

Hall E

Petra Hall 2

09:00 - 11:00 - Session 1

Laboratory Medicine

Moderators: Salah Jitawi MD, Ziad El -Nasser MD, Taisir Shubeilat MD

09:00 - 09:25 361	Introduction to CAP Lab Accreditation *Samir S Amr MD (Saudi Arabia)*
09:25 - 09:50 362	How to Get Ready for your Lab Accreditation *Samir S Amr MD (Saudi Arabia)*
09:50 - 10:15 363	Dysplastic Nevus and Melanoma Risk (Part I) *Ibrahim Khalifeh MD (Lebanon)*
10:15 - 10:40 364	Dysplastic Nevus and Melanoma Risk (Part II) *Ibrahim Khalifeh MD (Lebanon)*
10:40 - 11:00 365	Overview of Cervical Neoplasia in Jordan in 30 Years Past *Yahia F. Dajani MD (Jordan)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Anesthesia

Moderators: Sobhi Alghanem MD, Husam Faraj MD, Abdullah Obiedat MD

11:30 - 12:00 366	Ultrasound and Regional Anesthesia *Steven R. Clendenen MD (USA)*
12:00 - 12:30 367	Update in Cardiac Anaesthesia *Omar Al-Rawi MD (UK)*
12:30 - 12:50 368	Inhalational Agents, Review & Update *Imad Swaiss MD (Jordan)*
12:50 - 13:10 369	What's New in Neuroanaesthesia *Moawiya Ababneh MD (Jordan)*
13:10 - 13:30 370	Predicting Fluid Responsiveness, an Update *Ghazi Aldehayat MD (Jordan)*
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

Laboratory Medicine

Moderators: Hassan Ennab MD, Fayez Hajjiri MD, Nazmi Kamal MD

14:30 - 14:50 371	Immunohistochemical Markers in The Evaluation of Primary CNS Tumors *Maysa Al-Hussaini MD (Jordan)*
14:50 - 15:10 372	Drug-Induced Liver Diseases *Ismail I. Matalka MD (Jordan)*
15:10 - 15:20 373	FLT3 Internal Tandem Duplication and D835 Mutations in Acute Myeloid Leukemia Patients Diagnosed at Jordan University Hospital *Raida Oudat MD (Jordan)*
15:20 - 15:30 374	Identification of 60 Cases with a Rare Genetic Disease Alkaptonuria in Jordan *Mohammed Alsbou MD (Jordan)*
15:30 - 15:40 375	Prevalence of Meropenem Susceptibilty among Gram Negative Pathogens Isolated from Intensive Care Units in Jordan *Naheel Haloub MD (Jordan)*
15:40 - 15:50 376	Snapshot on Molecular Genetic Pathology Updates *Rame Khasawneh MD (Jordan)*
15:50 - 16:00 377	Measurement of Some Biochemical Parameters in Serum of Some children with Autism in Jordan *Abdul Rahman Al-Bazzaz MD (Jordan)*
16:00 - 16:10 378	Updated Guidelines in Immunophenotypic Characterization of Hematopoietic and Lymphoid Tumours *Raida Oudat MD (Jordan)*
16:10 - 16:20 379	Importance of Infrared Rays and X-ray Study of the Inhibition of Calcium Phosphate Lithiasis and Struvite Crystal Formation using Plant Extracts *Beghalia Mohamed PhD (Algeria)*
16:20 - 16:30	Discussion
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Anesthesia

Moderators: Abdelaziz Amro MD, Mohammad Alazam MD, Mohamad Saeed MD

17:00 - 17:25 380	Update in Thoracic Anaesthesia *Omar Al-Rawi MD (UK)*
17:25 - 17:50 381	Central Neraxial Ultrasound (Ultrasound of the Spine for Epidural Placement) *Steven R. Clendenen MD (USA)*
17:50 - 18:00 382	Where We've Come From & Where are We Going? *Moawiya Ababneh MD (Jordan)*
18:00 - 18:10 383	Impact of Bolus Dose of Vasoactive Agents on ST Segment Changes During Incremental Hypotensive Anesthesia Technique in ENT Surgery: Our Experience at King Hussein Hospital *Hazem M. Alkhaldi MD (Jordan)*
18:10 - 18:30	Discussion

Hall F

Wadi Rum 1

09:00 - 11:00 - Session 1

Plenary Session: Diabetes Mellitus

Moderators: Jehad Haddad MD, Abdelkarim Al-Khawaldeh MD, Mazen Ahmad MD

09:00 - 09:20 384	The Role of the Newer Drugs for the Management of Type 2 Diabetes *Paul E. Jennings MD (UK)*
09:20 - 09:40 385	Challenges in Managing Dyslipidemia in Diabetes *Nadim Jarrah MD (Jordan)*
09:40 - 10:00 386	Hypertension and Cardiovascular Disease in Diabetes ; Value of Strict Control *Jihad Haddad MD (Jordan)*
10:00 - 10:20 387	Meeting the Need for Better Diabetes Pregnancy Outcomes by Organised Pre-Conception Care *Eleanor M Scott MD (UK)*
10:20 - 10:40 388	Current Approach to the Management of Diabetic Retinopathy *Salwan Rassam MD (UK)*
10:40 - 11:00 389	Challenges in Managing T1DM in Children and Pediatric Age Groups *Sima Kalaldeh MD (Jordan)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2 - Symposium 2

Clinical Practice Guidelines

(Royal College of Physicians)

Moderators: Ali Jawad MD (UK), Ala' Al-Heresh MD, Atallah Al-Issa MD

11:30 - 13:30	To Illustrate Health Care Quality Improvement using the Topic of Chronic Obstructive Pulmonary Disease (COPD) and the RCP Quality Spiral *Elizabeth Avital MD (UK)* *Rhona Buckingham MD (UK)*

13:30 - 14:30 - Symposium 5

University of South Florida Health's Center for Advanced Medical Learning and Simulation (CAMLS) Symposium

(Sponsored by CAMLS LSI)
Judy Genshaft (USA)
Stephen Klasko (USA)
Deborah Sutherland (USA)

Moderators: Chip Diehl (USA), Aous Qutaishat (USA), Amer Amireh MD

14:30 - 16:30 - Session 3

Plenary Session: Military Medicine

Moderators: Mohammad Al-Abbadi MD, Atallah Hashem MD, Hashem Abdallat MD

14:30 - 14:50	Humanitarian Aid and Peace Keeping Contributions of the Royal Medical Services Director General of the Royal Medical Services *Major General Dr Abdelaziz Ziadat (Jordan)*
14:50 - 15:10	Transformational Change in the Australian Defence Force Health Services Air Commodore *Tracy Smart, Director General Corporate Health Management and Air Force Health Services (Australia)*
15:10 - 15:30	Self Evaluation towards Innovation & Attainment of Excellence in Healthcare *Lt Col Rabie'e Al-Rashdy RN PhD (Oman)*
15:30 - 15:50	The International Committee of Military Medicine: A 90 Years Old Organization. What for the Coming Next 90 Years? *Col. Neirinckx, MD, Assistant Secretary General of the International Committee of Military Medicine (ICMM)*
15:50 - 16:10	The experience of the Palestinian Medical Military Services in the Intifada *Brig Gen Dr Khalil Al-Naqeeb, Chief of Palestinian Medical Military Services (Palestine)*
16:10 - 16:30	Other Presentations by **Delegations of Military Medical Services** Details will be provided at the Session
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Military Medicine

Moderators: Mohammad Al-Quran MD, Khaled Ghzawi MD, Nawaf Al-Khazaaleh MD

17:00 - 17:20 390	The UK NHS and Military Approach to Major Haemorrhage *David Halliwell MSc Paramedic FIfL (United Kingdom)*
17:20 - 17:30 391	Medical Battalion versus Newly Organized Medical Military Support Group on Providing Health Care During Peacetime and Operations *Ali Refai MD (Jordan)*
17:30 - 17:50 392	School of Royal Medical Services "Achievements and Ambitions" *Lt Col Fawzia Ebrahim A Wahab (Bahrain)*
17:50 - 18:00 393	Paratroopers' Injuries During Jumps in the Joint Special Operations in Jordan *Samir Al-Ofeishat MD (Jordan)*
18:00 - 18:10 394	Variations in ABO System Re-Typing and Possibility of Warm Blood Transfusion in a Military Territory Personnel *Ali Refai MD (Jordan)*
18:10 - 18:20 395	Role of Preventive Medicine Department in Military Medicine *Mohammad Alzoubi MD (Jordan)*
18:20 - 18:30 396	The Role of the Royal Medical Services in Preparing Military Field Hospitals Inside and Outside Jordan *Hashem Abdallt MD (Jordan)*

Hall G

Wadi Rum 2

09:00 - 11:00 - Session 1

Pediatrics

Moderators: Abdelkarim Al-Qudah MD, Matrouk Al-Aoun MD, Saleh Al-Ajlouni MD

09:00 - 09:30 397	Overview for Spasticity Management in Adult and Pediatric Age Groups, the Most New Treatment Options *Yasser Awaad MD (Saudi Arabia)*
09:30 - 10:00 398	Update on Management of Intractable Epilepsy in Childhood *Abdel Karim Al-Qudah MD (Jordan)*
10:00 - 10:30 399	Tourette Syndrome, the Most Clinical and Practical Approach *Yasser Awaad MD (Saudi Arabia)*
10:30 - 11:00 400	Difficult Asthma in Children: Progress and Emerging Therapies *Talal Nsouli MD (USA)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Plenary Session: Bone Marrow Transplantation in Children

Moderators: Mahmoud Sheyyab MD, Ayad Al-Ahmad MD, Issam Haddadin MD, Adel Wahadneh MD

11:30 - 11:50 401	Haematopoietic Stem Cell Transplantation (HSCT) for Metabolic Disease *Colin Steward MD (UK)*
11:50 - 12:10 402	BMT for Haemoglobinopathies *Ayad Ahmed Hussein MD (Jordan)*
12:10 - 12:30 403	Recovery of Neutrophil Function by Hematopoietic Stem Cell Transplantation *Adel M. Al-Wahadneh MD (Jordan)*
12:30 - 12:50 404	Bone Marrow Transplantaion for Solid Tumors *Isam Hadadin MD (Jordan)*
12:50 - 13:10 405	Late Effects of Haematopoietic Stem Cell Transplantation (HSCT) in Children *Colin Steward MD (UK)*
13:10 - 13:30 406	Stem Cell Work in Jordan: Current Status 2012 *Abdalla Awidi Abbadi MD (Jordan)*

13:30 - 14:30 - Symposium 8

New Trends & Advanced Applications in CT

(Sponsored by GE Healthcare)
Melhem Younan BSc (UAE)

Moderators: Abdallah Al-Omari MD, Imad Athamneh MD

14:30 - 16:30 - Session 3

Pediatrics

Moderators: Wael Hayajneh MD, Nayef Rawabdeh MD, Mohammad Abu-Shuqair MD

14:30 - 15:00 407	Eosinophilic Esophagitis: Therapeutic Innovations *Talal Nsouli MD (USA)*
15:00 - 15:30 408	Cow's Milk Protein Intolerance - A Practical Guideline *Robert Heuschkel MD (UK)*
15:30 - 16:00 409	Advances in Allergy Immunotherapy *Talal Nsouli MD (USA)*
16:00 - 16:30 410	Optimizing Care in Childhood IBD *Robert Heuschkel MD (UK)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Pediatrics

Moderators: Waddah Khreisat MD, Mjalli Ahmad MD, Issa Hazaa MD

17:00 - 17:20 411	Barth Syndrome: Rarely Recognised but Frequently Fatal *Colin Steward MD (UK)*
17:20 - 17:50 412	Managing Acute Colitis in Children with IBD *Robert Heuschkel MD (UK)*
17:50 - 18:10 413	Pediatric Cancer Incidence and Survival 2000-2009 for Jordanian Population *Kamal Arqoub MD (Jordan)*
18:10 - 18:30 414	Growth Hormone Therapy Update *Mjalli Ahmad Hasan MD (Jordan)*

Hall H

Mou'ta Lounge

09:00 - 11:00 - Session 1

Community Medicine

Moderators: Adel Bilbisi MD, Sultan Abdallah MD, Mohamad Al-Madani MD

09:00 - 09:15 415	Sentinel Surveillance for Severe Acute Respiratory Infections in Jordan *Mohammad Al-Abdallat MD (Jordan)*
09:15 - 09:30 416	Pandemic Influenza (H1N1) 2009: Jordan Experience *Sultan Alqasrawi MD (Jordan)*
09:30 - 09:40 417	Acute Viral Kerato–Conjunctivitis: an Outbreak in July-August 2010 *Mahmud Abdallat MD (Jordan)*
09:40 - 09:50 418	The Coverage Rate of Hepatitis B Vaccination among Health Care Workers at Health Care Centers versus Hospitals In Irbid - Jordan *Ayat Khasawneh MD (Jordan)*
09:50 - 10:00 419	The Importance of Waist Circumference for Screening of Diabetes *Sameer Kofahi MD (Jordan)*
10:00 - 10:15 420	Sedentary Lifestyle among Adults - Jordan, 2007 *Ghazi Faisal Sharkas MD (Jordan)*
10:15 - 10:25 421	Epidemiology of Sharp Injuries at King Hussein Medical Center *Mohammad Alzoubi MD (Jordan)*
10:25 - 10:35 422	Epidemiological Characteristics of Cancer in Jordan (1996-2009) *Mahmud Abdallat MD (Jordan)*
10:35 - 10:45 423	Epidemiology of Imported Malaria Cases in Jordan Between 2000 and 2012 *Hayel Al-Mohareb MD (Jordan)*
10:45 - 10:55 424	Frequency of Proteinuria and Hematuria among Children at Age of School Entry in Al-Zarqa City - Jordan 2010- 2011 *Eqab AbuWandi MD (Jordan)*
10:55 - 11:00	Discussion
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Plastic Surgery & Dermatology

Moderators: Laith Akkash MD, Mohammad Saleh Al-Baddawi MD, Khaldoun Haddadin MD

11:30 - 12:00 425	Dual Plan Technique for Breast Augmentation with 3D Simulation and Measurement *Cemal Senyuva MD, Plastic Surgery (Turkey)*
12:00 - 12:30 426	Using Veinviewer Technology to Reduce Bruising During Facial Injections Cemal Senyuva MD,Plastic Surgery (Turkey)
12:30 - 13:00 427	How to Correct Facial Asymmetries with Botulinum Toxin *Anthony Benedetto MD,Dermatology (USA)*
13:00 - 13:30 428	Is it Possible to Perform Lower Eyelid Aesthetic Surgery without Considering Mid-Face? *Cemal Senyuva MD,Plastic Surgery (Turkey)*
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

Interventional Radiology

14:30 - 15:30 - Symposium 9

Subarachnoid Hemorrhage Management

(Sponsored by Al-Waed Medical Company, MicroVention TERUMO USA)

Moderators: Amer Al-Shurbaji MD, Moneer Dheat MD

14:30-15:00	Total management of SAH *Gyula Gal MD (Sweden)*
15:00-15:30	Flow Diverter Experience above Internal Carotid Bifurcation *Hazem Habboub MD (Jordan)*

15:30 - 16:30 - Symposium 10

Cerebrovascular Diseases

(Sponsored by Al-Waed Medical Company, Balt EXTRUSION France)

Moderators: Hazem Habboub MD, Majed Habahbeh MD

1530:-16:00	Endovascular management of cerebral AVMs and DAVFs *Gyula Gal MD (Sweden)*
16:00-16:30	The role of intracranial angioplasty and stenting for ischemic stroke *Sultan Al-Qahtani MD (Saudi Arabia)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Dermatology & Plastic Surgery

Moderators: Majed Jarrar MD, Haider Habahbeh MD, Isam Oumeish MD

17:00 - 17:20 429	Dermatology in the Ancient Arab Heritage *Oumeish Youssef Oumeish MD, (Jordan)*
17:20 - 18:00 430	How I Use Absorbable Fillers *Anthony Benedetto MD,Dermatology (USA)*
18:00 - 18:40 431	Botulinum Toxin Treatment of the Face *Anthony Benedetto MD,Dermatology (USA)*

Hall I

Harraneh Hall 1

09:00 - 11:00 - Session 1

Pharmacy

Moderators: Dr. Mu'tasem Fahmi, Pharm Saleem Jume'an, Pharm Khalil Ma'ali

09:00 - 09:30	Introduction to the Day and Welcoming
09:30 - 10:00 432	Pharmaceutical Care / Medicines Management - A Connected Health Approach *Prof James C McElnay (UK)*
10:00 - 10:15 433	Patient Counseling and Communication in Pharmacy "Patients as Partners" *Dr Lama Ahmad Ayed Al-Rashdan (Jordan)*
10:15 - 10:30 434	Microbiological Profile and Antibiotic Sensitivity in the Burn Unit at Royal Rehabilitation Center - Royal Medical Services *Nibal Abu-Ashour MSc, Clin Pharm (Jordan)*
10:30 - 11:00 435	Applications of Pharmacoeconomics *Dr Qais Al-Efan (Jordan)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Pharmacy

Moderators: Dr Abla Al-Bsoul, Pharm Reham Al- Nadif, Pharm Reem Al-Qutob

11:30 - 12:00 436	Improving the Safety and Effectiveness of Medicines in Children *Prof James C McElnay (UK)*
12:00 - 12:30 437	A Pharmaceutical Perspective of the Treatment of Type 2 Diabetes in Kerala State, India *Dr Ian L Naylor (United Kingdom)*
12:30 - 12:45 438	Bioequivalence Studies Regulation in Jordan *Rawan Al-Hiyari MSc Pharm (Jordan)*
12:45 - 13:00 439	Insulin Vials vs. Insulin Cartridges: Further Cost Considerations *Mohammad Ghassan Al-Sharayri MSc Pharm (Jordan)*
13:00 - 13:15 440	Effect of Smoking on Tacrolimus Trough Concentration and Renal Function in Jordanian Renal Transplant Recipients *Muhammad Al-Ulemat MSc Clin Pharm (Jordan)*
13:15 - 13:30 441	Role of Drug Information Center in Developing Medical Practice *Dr Ali Rawahneh (Jordan)*
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

Pharmacy

Moderators: Dr Mohammad Al- Share', Pharm Mohannad Al- Haj, Pharm Akef Al-Abdullat

14:30 - 15:00 442	Platform Technology for Oral Protein Delivery using Insulin as a Model Drug *Dr Adnan Badwan (Jordan)*
15:00 - 15:30 443	Critiquing Pharmacoeconomic Literature *Dr Qais Al-Efan (Jordan)*
15:30 - 15:45 444	Patients' Experiences and Knowledge about Using Coumarin and Coagulation Test *Alaa Mashour Yassien MSc Clin Pharm (Jordan)*
15:45 - 16:00 445	Supply Chain Management and its Impact on Health Care Quality among Private Hospitals *Ra'eda Al-Saaydeh, BSc Eng., MBA (Jordan)*
16:00 - 16:15 446	Drug Counterfeiting in Jordan: A Recent but Growing Problem *Ra'eda Al-Madadha MSc Pharm (Jordan)*
16:15 - 16:30	Discussion
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Community Medicine

Moderators: Khalel Kanani MD, Mohamad Abdelhafeth Al-Edwan MD, Rateb Al-Edwan MD

17:00 - 17:15 447	Contraceptive Methods Among Women Attending The Jordanian Association for Family Planning and Protection in Amman *Hala Aburomman MD (Jordan)*
17:15 - 17:25 448	The Effect of Paternal and Maternal Smoking Status of their Youth's Smoking Behavior among Jordanians *Zeyad A Bataineh MD (Jordan)*
17:25 - 17:35 449	The Rate of Obesity and Metabolic Syndrome at Prince Rashid Bin Al-Hassan Military Hospital *Zeyad Bataineh MD (Jordan)*
17:35 - 17:45 450	Breastfeeding Practice among Women Attended Primary Health Care Clinic at Prince Hashim Bin Al-Hussein Military Hospital *Mustafa Al Zboun MD (Jordan)*
17:45 - 17:55 451	Surveillance and Epidemiologic Aspects of Malaria Cases in Jordan *Khalil A Kanani MD (Jordan)*
17:55 - 18:10 452	Prevalence of Overweight and Obesity among Military Personnel in the North of Jordan and Some Associated Risk Factors *Osama Atoom MD (Jordan)*
18:10 - 18:30	Discussion

Hall J

Harraneh Hall 5

09:00 - 11:00 - Session 1

WS34 Nursing Workshop 1

Moderators: Col. Dr. Mohammad Banikhaled

09:00 - 11:00	Developing the Skills for Effective Communication with the Cancer Patient and Their Families *Sara Lister (UK)* *Alexandra West Oram (UK)*
11:00 - 11:30	Coffee Break

11:30 - 13:30 - Session 2

Psychiatry

Moderators: Radwan Ali MD, Mohammad Aqeel MD, Amjad Jmeian MD

11:30 - 12:00 453	ADHD Management Updates *John Fayyad MD (Lebanon)*
12:00 - 12:20 454	Violence Against Medical Personnel in General Hospitals *Mohammad Zaubi MD (Jordan)*
12:20 - 12:50 455	Child and Adolescent Mental Health Services: Future Perspectives in the Arab World *John Fayyad MD (Lebanon)*
12:50 - 13:00 456	Dental Phobia among Patients Attending Dental Surgery Clinics *Mohammad Zaubi MD (Jordan)*
13:00 - 13:30 457	Tourrette's Syndrome; Prevalance, Etiology, and Management Difficulties *John Fayyad MD (Lebanon)*
13:30 - 14:30	Lunch Break

14:30 - 16:30 - Session 3

WS35 Nursing Workshop 2

Moderators: Col. Hazem Ajarmah

14:30 - 16:30	Nurse Competence Evaluation *Riitta Meretoja (Finland)*
16:30 - 17:00	Coffee Break

17:00 - 18:30 - Session 4

Free Papers

Moderators: Mansour Karadsheh MD, Fawaz Khammash MD, Abdallah Akayleh MD

17:00 - 17:10 458	End Stage Renal Disease among Patients at Prince Ali Bin Al-Hussein Military Hospital *Amer Bderat MD (Jordan)*
17:10 - 17:20 459	The Importance of Platelet Indices for Predicting Myocardial Infarction *Quteiba Nuseir MD (Jordan)*
17:20 - 17:30 460	Review of Spinal Meningioma Cases at King Hussein Medical Center *Rakan Al-Lozi MD (Jordan)*
17:30 - 17:40 461	Endoscopy Evolution and Revolution *Rami Alqroom MD (Jordan)*
17:40 - 17:50 462	Patterns of Malignancies of Surgically Treated Lung Cancer at King Hussein Medical Center *Ala Qayet (Jordan)*
17:50 - 18:00 463	Reconstruction of Nasal Skin defects Following Excision of Basal Cell carcinoma *Mohammed Al-Bdour MD (Jordan)*
18:00 - 18:10 464	Perforation of Meckel's Diverticulum by Wood Splinter (Preoperatively Presented as Acute Appendicitis): Case Report with Review of Literature *Haitham Rbiehat MD (Jordan)*
18:10 - 18:20 465	Isolated Form of Sarcoidosis in the Spleen *Sahel Hammouri MD (Jordan)*

18:20 - 18:30 Discussion

Hall K
Harraneh Hall 6

11:30 - 13:30 - Session 2
Radiology

11:30 - 13:30 - Symposium 7
Implementation of the Agility 160 leaf MLC – Initial Experience of its Clinical Advantage
(Sponsored by Al Faisaliah Healthcare Systems Co.)
Chris Walker MD (UK)
Moderators: Sameer Khraisat MD, Belal Hiari MD

13:30 - 14:30 Lunch Break

INTERNATIONAL GUEST SPEAKERS

Medicine & Subspecialties

Alfredo R. Galassi
Associate Professor of Cardiovascular Medicine
Faculty of Medicine and Surgery
University of Catania
Department of Internal Medicine and Systemic Disease
Director of Diagnostic and Cardiovascular Interventional Laboratory, Clinical Division of Cardiology, Cannizzaro Hospital
Italy

Ali S M Jawad, MB, ChB, MSc , FRCP, FRCP, DCH, DMedRehad
Professor and Consultant Rheumatologist
The Royal London Hospital
Barts Health NHS Trust
UK

Anthony V. Benedetto, D.O., F.A.C.P., F.C.P.P
Clinical Associate Professor of Dermatology
University of Pennsylvania School of Medicine
USA

Ayman O. Soubani, MD
Professor Medicine
Department of Internal Medicine, Division of Pulmonary, Allergy, Critical Care and Sleep
Wayne State University School of Medicine
Detroit, MI
USA

Eleanor Margaret Scott
Consultant in Diabetes and Endocrinology
Senior Lecturer in Medicine,
Division of Cardiovascular and Diabetes Research
University of Leeds
Leeds
UK

Grigoris Stratakos, MD, FCCP
Professor in Interventional Broncho-Thoracoscopy and Pulmonary Rehabilitation
Lecturer and responsible of the Interventional Thoracic Endoscopy Unit
Respiratory Medicine Clinic
University of Athens
Athens,
Greece

John Thomas Anderson, MMEd, MD, FRCP
Consultant Physician and Gastroenterologist
National Lead for Endoscopy Training
Joint Clinical Lead for e-Endoscopy
Director of Gloucestershire Regional Endoscopy Training Centre
UK

John A. Fayyad, MD
Child and Adolescent Psychiatrist
Associate Professor of Clinical Psychiatry in the University of Balamand
Secretary General of the Eastern Mediterranean Association of Child and Adolescent Psychiatry and Allied Professions (EMACAPAP)
Vice President of the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP)
USA

Martin Kuhlmann
Martin K. Kuhlmann, MD
Director, Department of Internal Medicine
Division of Nephrology
Professor of Medicine and Nephrology
Vivantes Klinikum im Friedrichshain
Berlin,
Germany

Niall Quinn MA, MD, FRCP, FAAN
Emeritus Professor of Clinical Neurology
Institute of Neurology University College
Honorary Consultant Neurologist to the National Hospital for Neurology and Neurosurgery
London
UK

Olivier Bletry
Professor Internal Medicine
Chief of the Department of Internal Medicine - Hopital Foch
Paris
France

Paul Edward Jennings, MD
Consultant Physician in Diabetes, Endocrinology and Metabolism at York Hospital
Honorary Senior Lecturer in Clinical Medicine, University of Hull and the Hull/York Medical School
UK

Rieke Alten, MD
Head of Department of Internal Medicine II
Director of Rheumatology Research Center
Rheumatology, Clinical Immunology, Osteology
Physical Therapy and Sports Medicine
Schlosspark-Klinik
Teaching Hospital of the Charité, University Medicine Berlin
Germany

Roland Mark Valori, MB BS, MRCP, FRCP, MSc
Consultant Gastroenterologist
Gloucestershire Hospitals NHS Foundation Trust
UK

Stanley (SeungSuh) Hong,PHD
President of Research & Development Division at Celltrion Incorporation.
Korea

Wael Fahed Al-Husami, MD, FACC, FACP
Interventional Cardiologist, Vascular Medicine and Peripheral Endovascular Intervention
Director of International Health- Middle East program at Lahey Clinic Medical Center
Tufts University School of Medicine
Greater Boston MA
USA

Surgery & Subspecialties

Cemal Senyuva, MD
Professor and Head of Department of Plastic, Reconstructive and Aesthetic Surgeon
Istanbul,
Turkey

Fiona MacNeill FRCS, MD
Consultant Breast and Reconstructive Surgeon
Royal Marsden Hospital
London,
UK

John M. Park, MD
Associate Professor of Urology
The Cheng-Yang Chang Endowed Professor of Pediatric Urology
University of Michigan, Ann Arbor, MI
USA

Luis Alencar Biurrum Borba, MD
Assistant Professor in Functional Placement
Department of Neurosurgery
Brasil

Manfred P. Wirth, MD
Professor of Urology
Head of Department of Urology Technical University Dresden
Vice Dean of the Medical Faculty of the Technical University of Dresden
Germany

Michael R. Müller, MD, PhD
Professor of Thoracic Surgery
Chief, Division of Thoracic Surgery
Otto Wagner Hospital
Vienna, Austria

Sarah T O'Dwyer, BSc, MB ChB, MD FRCS FRCSEd
Consultant Surgeon, Colorectal and Pelvic Surgical Oncology
Director the Peritoneal Tumor Service
Christie Hospital, Manchester,
UK

Steven Curley
Professor Surgeon
Department of Surgical Oncology
The University of Texas M. D. Anderson Cancer Center
Houston, TX
USA

Thomas Knoll, MD PHD MSC
Professor of Urology
Head and Chairman Department of Urology
Klinikum Sindelfingen-Boblingen
Germany

Orthopedic Surgery

Ahmad Nasser Bo-Eisa, FRCS, FAOS, FKFS
Consultant Pediatric Orthopedic and Deformity Correction Surgeon
Chairman of Orthopedic Department
King Fahad Hospital
Saudi Arabia

Alejandro Badia, MD, FACS
Hand and Upper Extremity Surgeon
Badia Hand to Shoulder Center
Doral, Florida
USA

Alfred Khoury, MD
Professor Orthopedics, Sport Injury
University Medical Center-Rizk Hospital
Beirut,
Lebanon

Peter Giannoudis, BSc, MB, MD, FRCS
Professor & Chairman Orthopedic and Trauma Surgery and Sport Medicine
Academic Department of Trauma & Orthopedic Surgery,
Leeds General Infirmary University Hospital Leeds
UK

Pediatrics & Subspecialties

Colin Graham Steward, MA; BM BCh; BSc; FRCP; FRCPCH; PhD MRCP(Paeds)
Honorary Consultant in Bone Marrow Transplantation
Bristol Royal Hospital for Children & Reader in Stem Cell Transplantation
Department of Cellular & Molecular Medicine
School of Medical Sciences, University of Bristol
UK

Robert Heuschkel
Rob Heuschkel , MBBS MRCPCH
Consultant in Paediatric Gastroenterology
Dept of Paediatric Gastroenterology, Hepatology & Nutrition
Addenbrookes Hospital
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After leaving Staff of Jordan University Hospital and Medical School, turned to private practice in Amman until the present time, with intermittent teaching tenures.

Ziad Mohammad Hawamdeh
Physical Medicine and Rehabilitation
Dean Faculty of Rehabilitation Sciences

ABSTRACTS

TUESDAY

20 November 2012

Hall A Session 1
Nursing

1
Leishmania Diagnosis
Dr Nawal Sameeh Hijjawi (Jordan)

Cutaneous leishmaniasis is an endemic disease in Jordan where few hundred cases are reported annually. During the last few years in Jordan occasional large outbreaks occurred in endemic and new foci. Studies toward the identification of the causative Leishmania species is lacking and always the diagnosis relies on the clinical presentation and the microscopic identification of the parasite in Giemsa stained smears prepared from the lesion. Leishmaniasis diagnosis in regions where multiple species exist should be aimed at identifying each species directly in the clinical sample. Therefore, the present study aimed at applying a DNA-based assay using internal transcribed spacer1- polymerase chain reaction (ITS1-PCR) for the diagnosis of leishmaniasis in clinical samples isolated from Jordanian patients and to compare the results with the microscopic diagnosis using Giemsa staining procedure. In 28 out of the 41 clinical samples inspected from Leishmania infected patients, amastigotes were observed by microscopy but does not allow species identification. However ITS1-PCR analysis for the same samples recovered 30 positives out of the 41 samples. Further analysis for the infecting species by digestion of the ITS1 amplicons with the restriction enzyme Hae III revealed 28 clinical samples to be infected with L. major and 2 with L. tropica.

2
Nursing Workforce: Policy Implications for Health Reform
Dr Rowaida Al-Ma'aitah (Jordan)

Although Nursing in Jordan crowned the nursing profession in the Middle East, the quality of the nursing care and planning for efficient and effective workforce to fulfil the health needs of populations are still considered main challenges for nurses and policy makers specially with the absence of a solid health reform in Jordan.
The national Agenda of Jordan in 2005 highlighted the main pillars and interventions for a stronger Jordan including a solid health reform. It also recognizes nursing as an essential investment in the health care industry and the economy of the country. Unfortunately, neither the agenda nor the health reform dreams have became a reality so far since 2005. The lag in realizing the goals of the National Agenda created a "foggy zone" in the health care system and services in Jordan leaving the nursing profession with lingering imbalances in its workforce and the quality of care.
This plenary session provides a critical analysis of the directions of the nursing workforce in Jordan during the period from 2003-2011 focusing on key trends, main challenges, current evidence and policy initiatives pertinent to the nursing profession and health reform.
New concerns are arising about the quality of nursing care questioning the soundness of the content and process of nursing education and training, competencies for nursing practice, scope of practice and level of sophistication needed for nurses to be able to play significant and more independent roles within a new era of "shifting" health problems and needs as well as a more complex health care system. "Retooling" nursing education, "recalibrating" the content and process of clinical practice, "molding" the scope of nursing practice, "revamping" working conditions, "costing" the impacts of nursing care on improving quality of care, "honing" the skills of nurses in evidence based practice, "engaging" nurses at different policy making levels; are all essential in formulating solid policies to "regain the balance" in nursing workforce and "engage with reality" to make a true investment in a well-prepared nursing workforce with increased efficiency, innovation and better health outcomes within a solid health reform.

3
Resilience and Leadership

Ms Sarah Lister, Nursing, Royal Marsden (UK)

As research into leadership has developed it has been recognised that one of the most important qualities of good leadership for today's healthcare is emotional intelligence (Goleman 2002). This means that effective leaders know the personalities, strengths and vulnerabilities of their staff members. As a leader they may be looked to for support as well as being challenged at a personal level. This may mean the leader is looked to as "container for the anxiety". This role is increasing in healthcare as the environment in which we work becomes faster, more complex and the suffering and distress witnessed more intense.

This very different demand on those in leadership roles calls for the ability to be "resilient": that is not only keep going and coping, but also to do so without becoming "burnt out" or unable to function.

During this presentation there will be a review of the concept of psychological resilience and an exploration of the how the research in this area can be used to help the leader look after themselves but also how they can use it in clinical practice to support those they lead. The session will include suggestions of brief activities that can be used either with a team or used personally to increase the ability to cope in difficult situations.

4
Evaluation of Nurse's Competencies and Developmental Challenges

Dr Riitta Meretoja RN PhD (Finland)

Targeting practising nurses' competencies to optimal use is one of the strategic challenges of current health care internationally. To achieve this, a systematic assessment of nurse competence and its critical appraisal are justified. One of the key responsibilities of nurse administrators is to ensure nurse competencies are put to the best possible use in patient care. However, they are often unable to implement systematic evaluations because of the rapidity of changes, lack of clarity in a clinical career structure, and the difficulties encountered in selecting reliable, valid and practical measures. Competence recognition has been identified as a key contributor to job satisfaction and retention of nurses. One of the challenges presented to competence assessment is to define and quantify the key aspects of nursing practice so that it is possible adequately to differentiate between different competence levels and so that the validity of that delineation can be established. Literature reviews have shown that there is only comparatively little research into the competence of practising nurses. There are only few comparative studies that have looked at different work environments or at the ratings of different evaluators, even though there is evidence that there is variation in these regards. Nurse competence research would benefit from studies in which, in addition measurements of competence, also other aspects related to professional development were taken into account, such as motivation and career orientation.

Hall A Session 2
Nursing Plenary Session
Enhancing the Quality of Life of Cancer Patients

5
Overview of Cancer Care in RMS

Raid Marji MD, Oncology Medicine (Jordan)

Cancer is made up of more than 200 individual diseases, each with its own unique causes, risk factors and care pathways. It takes more than one physician or clinic to treat and control cancer; it takes an entire healthcare team that includes, among others, Surgeons, oncologists, nurses, pharmacists, pathologists and palliative care teams.

The cancer system begins with prevention and health promotion, with the ultimate goal being to prevent cancer in the first place. The detection and care of cancer patients involves every area of the healthcare system in some way.

Royal Medical services are responsible for continually improving cancer services:

- Implements cancer prevention and screening programs designed to reduce cancer risks and raise screening participation rates.
- Works to develop and implement quality improvements and standards.
- Uses electronic information and technology to support patient self-care and

to continually improve the safety, quality, efficiency, accessibility and accountability of cancer services.
- Plans cancer services to meet current and future patient needs, and works to continually improve cancer care for the people we serve.
- Rapidly transfers new research into improvements and innovations in clinical practice and cancer service delivery.

We have daily clinics at KHMC and we cover all the RMS hospitals. All are involved in providing cancer prevention, screening, and diagnostic and treatment services.
Number of patients Seen at KHMC oncology clinic by year: 2009 (14704), 2010 (16264), 2011 (24314)
Number of admissions to KHMC oncology department by year: 2009 (1899), 2010 (2823), 2011 (3436).

6
Supportive Communication: an Essential Component of the Care of any Cancer Patient

Ms Sarah Lister, Nursing, Royal Marsden (UK)

Nobody would dispute that a cancer diagnosis and subsequent treatment is stressful and emotionally demanding. A variety of approaches are used in healthcare to reduce and help the patient and family cope. These range from medication, psycho-educational approaches and counselling to more generalised supportive communication from all healthcare professionals involved in care and treatment.
This presentation will explore the concept of supportive communication, look at what patients in the United Kingdom have said they want from health care professionals, and review the skills necessary for supportive communication. These skills will be explored further in the workshop.

7
Role of Psychology in Pain Management

Dr Amineh Al Tamimi, Psychology, King Hussein Cancer Center (Jordan)

Pain often co-exists with mood, sleep and functional disorders that require additional attention to optimize pain management, and mapping psychological approaches in treating pain helps in managing the pain behaviors and cognitions rather than directly eliminate the pain itself.
The Psychological interventions in psychological approaches aims at: achieving increased self-management, improving pain-coping resources, reducing pain-related disability and emotional distress improvements, by teaching patients some behavioral and cognitive techniques that reflect on changing patients' not adaptive behaviors or cognitions.
The Presentation will stress on the Benefits of including psychological interventions in multidisciplinary approaches for management of pain, and the participants will have the opportunity to understand the psychological pain cycle, and recognize some of psychological techniques and it effect on Patient quality of life.

8
Pain Management in Patients with Cancer in Jordan

Mustafa Beano MD, Palliative Medicine (Jordan)

Cancer Pain remains unresolved issue worldwide, Jordan is no exemption, unfortunately this is despite the possibilities we have to treat the pain adequately, but legal and bureaucratic restrictions on opioid drugs hamper patient access to proper pain management. These restriction initially were introduce to stop drug abuse, but proved to interfere seriously with patient access to opioids, which remain the corner stone in cancer pain management.
Jordan had many restrictive lows and regulation governing narcotic medications. Restriction put Jordan in very unfavorable position in this aspect measured by morphine consumption, namely Jordan was in 81st. place worldwide in late eighties a 10th. place between Arab countries. Many changes had been made in lows and regulation which improved opioid availability, leading to change in Jordan's position worldwide and between Arabic countries, in 2007 Jordan was the first Arabic country in morphine consumption and 46th.worldwide, a position lost in later years. Lots of efforts are still needed to control cancer pain in Jordan.

9
Nutritional Support of Patients with Cancer

Dr Annalynn Skipper, Clinical Nutrition (USA)

The relationship of foods and nutrients to cancer is of interest to the scientific community, health practitioners, policy makers and members of the public. Nutrition recommendations change depending upon whether the intent is to prevent or treat this feared disease. Cancer prevention using diet focuses on avoiding known carcinogens, balancing physical activity and exercise to maintain a healthy weight, limiting consumption of processed meat and red meat, eating five servings of fruits and vegetables each day, and choosing whole grains rather than refined grain products. Cancer and cancer treatment is often accompanied by loss of appetite or changes in taste that patients and their family members find distressing. Many cancer patients experience weight loss and malnutrition that require intervention by a dietitian. Special foods and supplements sometimes help in preventing weight loss although individualized treatment is needed for each patient. Once patients begin to recover from side effects of cancer treatment, early intervention with a general, healthful diet is recommended. Patients who are terminally ill from cancer usually have all diet restrictions removed so that they may eat favorite foods as tolerated. The future of cancer prevention and treatment with foods and nutrients depends upon improved research **method**s for measuring how modified food and nutrient intake correlates with changes in the incidence or course of cancer.

10
Supporting New Roles in Cancer Services: The Importance of an Educational Framework

Mrs Alexandra West Oram, Nursing, Royal Marsden (UK)

As cancer treatments and services continue to evolve across the world there are a wide variety of opportunities to develop and implement new roles to support this service development and enhance the care of patients with cancer. There is a need for an educational framework to provide a structure to support the development, implementation and evaluation of such roles.

This paper will explore the range of educational strategies that are offered by the Royal Marsden School of Cancer Nursing and Rehabilitation to develop the knowledge and skills of health care professionals and support workers in their cancer practice. It is recognized that critical thinking, experiential learning and reflective practice are key components of any educational approach in order to ensure that healthcare workers are fit to practice within their chosen specialty. The School has a proven track record in offering a wide range of formal academic and informal education programs across the UK and internationally. A role development program that has been developed for Cancer Multidisciplinary Team / Patient Pathway Coordinators will be used to illustrate how a program of cancer education can be tailored to meet the needs of an international audience to support the development of new roles.

Hall A Session 3
Plenary Session
Introduction to Biomedical Research

11
Selection of a Study Population and Study Design

Saher Shuqaidef MD (Jordan)

12
Writing a Manuscript

Hashem Jaddou MD (Jordan)

This lecture will highlight the research process steps, Research Planning, the study question, Preliminary investigation, Pilot studies, Literature Search, Anatomy of a Research Paper, and the Abstract structure.

13
Ethics and Good Clinical Practice in Research

Salah Mawajdeh MD (Jordan)

This presentation will focus on the historical development of clinical research guiding principles. It will begin by presenting the Hippocratic Oath (late 5th century BC) and

track the evolution from the "do no harm" principle to modern day Good Clinical Practice (GCP).
The presentation will also discuss some of the inherent biases between the pharmaceutical industry and clinical research and whether there is a reason to be concerned on public safety and welfare. The role of regulatory bodies, voluntary associations, advocacy groups and physicians will be discussed.
Solutions to deal with some of the ethical dilemmas will be discussed along with guiding principles

Hall A Session 4
Plenary Session
Introduction to Biomedical Research

14
Quantification and Interpretation of Statistical Associations
Anwar Batieha MD (Jordan)

Statistical associations can be real or false. False associations may be due to chance, confounding, or bias. Each of these possibilities will be discussed together with approaches to rule them out.
Measures of associations include the relative risk, odds ratio, and attributable risk. Calculation of each of these measures as well as its meaning and the situations in which it is possible to calculate it will be explained.
The Correlation coefficient and its interpretation will be briefly discussed.

Hall B Session 1
Plenary Session: Surgical Site Infection (SSI)

15
Surgeon Role in Decreasing SSI
Sarah O'Dwyer MD (UK)

16
Prevention is Better than Cure
Wail A. Hayajneh MD (Jordan)

17
Emerging Strains of Resistant Bugs, What to do?
Montaser Bilbisi MD (Jordan)

18
Role of Microbiologist in Treating SSI
Azmi Mahafzah MD (Jordan)

19
New Generations of Antibiotics, Please Use Wisely
Dr Lama Kazan (USA)

Surgical site infections are the most common nosocomial infections in surgical patients, accounting for approximately 500,000 infections annually. The risk of surgical site infection (SSI) is approximately 1–3% for elective clean surgery. Apart from patient endogenous factors, the role of external risk factors in the pathogenesis of SSI is well recognized. However, among the many measures to prevent SSI, only some are based on strong evidence, for example, adequate peri-operative administration of prophylactic antibiotics, and there is insufficient evidence to show whether one **method** is superior to any other. On the other hand, when surgical site infection is suspected (i.e. cellulitis), either de novo or because of treatment failure, patients are given antibiotics that covers the likely causative organisms. This presentation will shed the light on the importance of prophylactic antibiotics peri-operatively and focus on appropriate antibiotics options for the treatment of surgical site infections based on the most current guidelines and up-to-date studies. This is all while taking into consideration the site of infection and considering local resistance patterns and the results of microbiological tests.

20
Management of Severe Sepsis in 2012 and Beyond
Ayman O. Soubani MD (USA)

Severe sepsis is a common occurrence in critically ill patients and a major cause of morbidity and mortality in this population. Management relies on the early identification and treatment of the underlying causative infection, adequate and rapid hemodynamic resuscitation,

support of associated organ failure, control of hyperglycemia and corticosteroids in severe septic shock.
This presentation provides an overview of the recently updated guidelines for the management of patients with severe sepsis and examines the evidence behind these recommendations.

Hall B Session 2
Lower Gastrointestinal Tract

21
Complex Colon and Rectal Cancer
Sarah O'Dwyer MD, Colorectal Surgery (UK)

22
How to Deal with Difficult or Big Colonic Polyps
John Anderson MD, Gastroenterology (UK)

Modern colonoscopy practice now regularly encounters large and difficult lesions. Historically the majority of these cases would have resulted in surgery, with the associated risks and complications. The majority of these lesions are amenable to colonoscopic removal. With increasing experience in dealing with these lesions there is now some emerging data and best practice evolving. This lecture will cover the issues relation to complex and difficult colonoscopic polyp removal It covers both practical and organizational aspects of therapeutic colonoscopy. Recent data from the UK Bowel Cancer Screening Program will be included.

23
GI Complications of Cancer Treatment
Sarah O'Dwyer MD, Colorectal Surgery (UK)

24
Assessing Colonoscopy
Roland Valori MD, Gastroenterology (UK)

Colonoscopy is the gold standard technique for investigating the colon. It plays a major role in the detection and prevention of colorectal cancer. There is compelling evidence of unacceptable variation in the quality of colonoscopy and this variation has a major impact on clinical outcomes. Application of robust assessment methods ensure only competent colonoscopists are allowed to practice independently and there is continuous improvement of independent colonoscopists. This presentation explains the difference between assessment of competency and assessment of performance. It illustrates how rigorous assessment of colonoscopy in the UK has led to a reduction in variation and an improvement in the quality of colonoscopy across a nation. The principles underpinning assessment of colonoscopy are valid in many other areas of medicine.

25
Current Management of Peritoneal Carcinomatosis
Sarah O'Dwyer MD, Colorectal Surgery (UK)

26
Colorectal Cancer at One Referral Center
*Amer Amireh MD**
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Objectives: The aim of this study was to review demographic features and histopathology profile of colorectal cancers seen at King Hussein Medical Center, Amman, Jordan.
Methods: Our study consisted of 373 colorectal cancer specimens that were examined in the department of histopathology over a period of 10 years from July 2001 to May 2011. Retrospective data were retrieved and analyzed. The site of the tumors and presentation; histopathologic characteristics such as differentiation, TNM staging, lymphovascular invasion; completeness of excision of all tumors were studied and compared with age and gender of the patients.
Results: There were 210 males (56%). The mean age was 59 (range 16-86) years, with a median of 60 years. Ten percent of the tumors occurred in patients aged less than 40 years, and 58 percent of patients were above 60 years. There were 383 cancers in our cohort, two

hundred and eighty four (74%) colonic, eighty one (21%) rectal, seventeen (4.5%) rectosigmoid and one ileal (<1%) cancers. Seventy-five percent of tumors occurred in the left side, 9 percent were Stage I and 7 percent were Stage 4. Two patients had familial adenomatous polyposis and one with ulcerative colitis.

Conclusion: Standardization of the histopathology reporting system and avoidance of under-reporting is critical for proper patients' management. In addition, younger age at presentation and high incidence of emergency surgery raise the need for screening plans and launching public awareness campaigns, and comprehensive colorectal cancer education programs for the population via an efficient use of the press and audiovisual media.

Hall B Session 3
Lower Gastrointestinal Tract

27
Quality Assurance of Endoscopy and Other Medical Services

Roland Valori MD, Gastroenterology (UK)

Quality assurance is a process that ensures that a service or product achieves a pre-defined set of standards. Thus quality assurance requires a set of standards, and a process for measuring and enforcing them. This presentation describes how a quality assurance process has been applied to an endoscopy service nationwide and how the example of endoscopy is accelerating the development of quality assurance of other medical services. It explores the ingredients of a successful process and discusses how it might be applied in medical settings outside the UK.

28
Endoscopy - The View Looking Forward

John Anderson MD, Gastroenterology (UK)

Endoscopy has undergone a rapid development in a number of different areas; service provision, technological advancement, training and therapeutic skills acquisition. With significant improvements in equipment the whole gastrointestinal tract is now accessible. Increasingly complex and difficult procedures are now possible and bowel cancer screening programmes have accelerated the expertise in endotherapy. This presentation reviews some of the major changes that have been observed with reference to future practice. it looks at new technology, novel training concepts and speculates as to how endoscopic services may evolve over the next 10-20 years.

29
The Role of Clinical Leaders in Modern Health Care

Roland Valori MD, Gastroenterology (UK)

The British Government has placed strong emphasis on more and better clinical leadership in the National Health Service in recognition that clinical leaders, and especially medically qualified leaders, are perfectly placed to accelerate improvements in healthcare. This presentation explains what makes effective clinical leaders and explores how they can transform both the quality and efficiency of care. It argues that it is essential to have effective clinical leaders at all levels of health care delivery to maximise the potential for change.

30
Key Elements of Endoscopy Training

John Anderson MD, Gastroenterology (UK)

The focus of endoscopic practice has changed from a routine diagnostic test (high volume, low quality) into a integrated modality of investigation and treatment and management of patients with gastrointestinal problems (high volume and high quality). The demand for high quality and patient focused practice has led to a review of existing training methodology. The UK have led the world in developing this training methodology. Generic motor skills training and teaching methodology has been adapted and applied to endoscopic practice. The lecture covers the key steps necessary for successful endoscopic training and reviews some of the support and infrastructure necessary to maintain a high quality endoscopic training program.

31
Reversal of Hartman's Operation by Single Port Applied to the Colostomy Incision

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Objectives: To minimize the surgical trauma, for patients going Hartmann reversal operation. We used the single port **method**, through the orifice of the colostomy, to obtain the advantages of the single port and the laparoscopy all together.
Methods: We do an elliptical incision around the stoma, proximal to the skin edge. Once the stoma is free partially, we close the stoma to avoid continues Contamination. The anvil of the circular stapler is introduced in the lumen of the proximal part; a purse string monofilament suture is applied around to be completely tide. The left colon segment with the anvil in place is then pushed in to abdominal cavity. Through the colostomy opening we introduce the single port device; Once the rectal stump is ready, we perform the anastomosis as usually with the circular stapler. We check the bleeding, washout the cavity, put Jackson-Pratt drain on place, and then we take out the single port device, and close the colostomy incision.
Results: Ten patients underwent this procedure between June 2009 and March 2012.The morbidity was less than open method, the mortality was -0- , the length of stay was around 8,6 days.
Conclusion: The use of the single port, allows the use of the colostomy incision for the reconstruction, avoiding new aggression to the abdominal wall. All our cases discharged without severe complications, the admission was one day before surgery.

32
Management of Fistula-in-Ano

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Objectives: Fistula in ano is a common condition that has different management approaches. We present our data on fistula in ano treatment in the newly formed colorectal unit at King Hussein Medical Center.
Methods: The case records of 91 patients with different types of fistula in ano treated surgically over a period of twenty six months were retrospectively reviewed. Anatomic classification and operative procedure of all fistulae were recorded.
Results: Between March 2009 and May 2011, 85 patients underwent surgery for fistula in ano. There were 76 (89%) males, with a mean age of 39.1 years (range 19-76). Eleven patients had superficial, 5 patients had inter-sphincteric, 68 patients had trans-sphincteric, 3 patients had supra-sphincteric and five patients had extra-sphincteric fistulae. Fistulotomy was the commonest procedure (n.40) with marsupialization in 20 patients, followed by loose Seton (n.33), endorectal advancement flap (n.5), tight Seton (n.4) and ligation of the intersphincteric fistula tract (LIFT) procedure (n.2).
Conclusion: Large variety of procedures designed for the treatment of fistula in ano reflects the complexity of this condition. Careful selection of the treatment method that takes into account the anatomy of the fistula, state of the anal sphincters and patient's preference is central in the successful management of fistula in ano.

33
Diffuse Giant Small Bowel Diverticulosis Presenting with Intestinal Obstruction: A Case Report and Literature Review

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Objectives: Here we present a case of diffuse giant jejunal diverticulosis that present with intestinal Volvulous
Methods: Case report: A 61 year old female patient who presented with severe acute abdominal pain and vomiting of 2 days prior to admission.
Plain abdomen radiograph showed significant dilatation of small bowel loops with multiple air fluid levels. (Fig 1). A provisional diagnosis of small intestinal obstruction was made and the patient was admitted accordingly. Conservative management was started with an N/G tube was inserted. Abdominal ultrasound scan showed grossly dilated small bowel loops with excessive bowel motion .Free intraperitoneal fluid was seen at time of examination laparotomy confirmed the presence of volvulus with "dusky "appearance and perforations at the diverticula in the obstructed loop and enumerable large sized diverticula involving the whole small bowel starting from the duodenum distal to the ileum figure 3. The obstructed loop was excised with a satisfactory safety margins. End - to -end anastomosis was made. The post operative course
Results: Diverticulosis of the small bowel is a rare disease and may be congenital or acquired with a prevalence of about 1% in general population (10). The incidence of jejunoileal diverticula in studies of the small bowel by enteroclysis is 2-2.3% which is comparable to autopsy data presenting an incidence of 1.3-4.6% for diverticula of the jejunum and ileum The case we report represents a rare occurrence of diverticula disease involving the whole length of small bowel loops at the same time.
Conclusion: This is a new case diffuse giant small bowel diverticulosis that present with strangulation of the jejunum due to volvulus. Although this case is rare, small bowel diverticula may present with different situations
Keywords: Small bowel diverticulosis; jejunal diverticulum; intestinal obstruction; acute abdomen, whirl sign,

Hall B Session 4
Hepatobiliary Surgery

34
Screening Patients for Hepatocellular Cancer

Steven Curley MD (USA)

Historically, only 10% of hepatocellular cancer (HCC) patients are diagnosed with early stage, potentially curable disease. We prospectively screened chronic hepatitis virus-infected patients to determine 1) the proportion diagnosed with potentially curable HCC, and 2) survival following curative therapy. The study included 5670 chronic hepatitis B (1,077, 19.0%), C (4,196, 74.0%), or both (397, 7.0%)-infected patients enrolled in a prospective screening program (Hepato gastroenterology2009;56(93):1152-1156). Screening was every 6 months with serum alpha-fetoprotein (AFP) measurement and ultrasonography. Curative treatments included liver transplantation, resection, RFA, and/or ethanol injection.HCC was diagnosed in 464 (8.2%) patients. Of 1006 cirrhotic patients, 462 (45.9%) developed HCC. Curative treatment was possible in 319 (68.7%). The 2- and 5-year overall survival rates in the curative treatment group were 65% and 28%, respectively, compared to 10% and 0% in the advanced disease group ($p < 0.001$).Prospective screening of patients at high risk to develop HCC increases the proportion diagnosed with potentially curable disease. This may result in an increase of the number of long-term survivors. A screening strategy should focus on those patients with chronic hepatitis B or C virus infection that has progressed to cirrhosis since more than 40% of these patients will develop HCC.

35
Asisted ERCP by Laparoscopy in Biliopancreatic Diversion without Gastrectomy, and Other Cases

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Objectives: To prove the viability of laparoscopically assisted therapeutic ERCP through a gastric remnant or jejunum in patients with previous bariatric surgery or other procedures.

Methods: In close collaboration with will trained endoscopy team, 6 patients diagnosed of coledocolitiasis, after biliopancreatic diversion or bypass, underwent assisted ERCP. En one case the previous surgery was for duodenal perforation, with duodenal exclusion. Under general anesthesia, we start creating pneumoperitoneum , then we introduce the trocars, one of them in the left hipocondrium, to be used by the endoscopist. Routine abdominal exploration is done, and then we do small gastrostomy in the remnant part of it, or jejunostomia, depend on the case. We assist the endoscopist to introduce the endoscope inside the gastrotomy or the jejunostomy. Four cases underwent laparoscopic gastrotomy in the remnant stomach. On the other two patients, we perform laparoscopic jejunostomy, for the introduction of the gastroscop. Once the ERCP is completed successfully, we proceed to the closure of the gastro or jejunostomy, manual or mechanical.

Results: In all cases the calculus extraction was successful, complications was, one case of acute pancreatitis, one case of biliary leek(The duodenal perforation), one case of upper G.I bleeding, (self limited).

Conclusion: Laparoscopy-assisted transgastrostomy or jejunostomy ERCP appears to be a safe and efficacious method for management of biliary problems in patients with previous alimentary tract surgery which altered continuity of it.

36
Targeted Nanoparticles and Non-Invasive RF Thermal Therapy for Liver and Pancreas Cancer

Steven Curley MD (USA)

The use of cytotoxic and targeted agents to treat many types of cancer have led to only minimal improvements in median survival time. Non-invasive radiofrequency field-induced targeted hyperthermia using nanoparticles is a radical departure from conventional cancer treatment modalities. It is known that metallic or semi-conducting materials release heat upon exposure to radiofrequency electrical fields. We have delivered metallic nanoparticles targeted to cancer cells, then exposed the cells to a non-invasive radiofrequency field to produce thermal injury.Both carbon (C60) and gold nanoparticles are not toxic in vitro or in vivo to cancer cells or normal tissues. However, cancer cells treated with these nanoparticles and then exposed to a non-invasive radiofrequency field demonstrate thermal dose-related cytotoxicity. Importantly, we have demonstrated that conjugation of targeting moieties to the surface of the nanoparticles, including antibodies, pharmacologic agents, or peptides, can be used to enhance the uptake of these nanoparticles both in vitro and in vivo. Radiofrequency field treatment of animals treated with the targeted nanoparticles leads to significant antitumor response in hepatocellular cancer models, but is not associated with any side effects or toxicities in the animals. More complex conjugations are now being performed to include addition of cytotoxic agents or biologic agents onto the surface of nanoparticles. This can lead to enhanced delivery of chemotherapy agents to the cancer cells using doses much less than would be usually given by systemic administration. As a result, there is no chemotherapy-related toxicity, but there is significant synergistic enhancement of thermal cytotoxicity combining hyperthermia with the cytotoxic or biologic agent.

37
Surgical and Regional Treatment of Hepatocellular Cancer

Steven Curley MD (USA)

The standard surgical management for early-stage hepatocellular cancer (HCC) consists of resection or liver transplantation. However, only 10% to 30% of patients initially presenting with HCC will be eligible for surgery. In general, the treatment of HCC is dependent not only on the extent of tumor but also on the level of underlying hepatic dysfunction. Patients with cirrhosis may be candidates for limited surgical resection, liver transplantation, or locoregional ablative treatment, depending on the severity of the cirrhosis. In patients with no evidence of cirrhosis, hepatic resection has been the mainstay of surgical treatment. In patients with moderate to severe cirrhosis (Child-Pugh class B or C), transplantation is potentially optimal therapy for small-size, otherwise resectable HCC, because it eliminates the underlying cirrhosis that puts the liver at risk for subsequent new primary tumors. The ideal treatment strategy, but also more controversial for small HCC in patients with mild cirrhosis may include resection, thermal tumor ablation, or transplantation. However, because of limited donor organ availability and also for cultural and economic reasons, surgical resection is the mainstay of therapy worldwide for patients with liver-confined HCC. Ablation therapies are also now used more frequently in patients who lack the functional hepatic reserve to tolerate resection.

38
Laparoscopic Biliopancreatic Diversion, for the Treatment of DM II

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Objectives: The Laparoscopic biliopancreatic diversion without gastrectomy.is an effective technique for the control, of diabetes mellitus II associated to morbid obesity. We present 2 series with different lengths of common limb, and consequences

Methods: 82 Patients underwent metabolic surgery in our unit, 51 Male, 31 female, ages: 29 to 65 years, BMI range 32, 2(30-35). 49 Patients was insulin dependent. The inclusion criteria in the protocol were: Diabetes mellitus II(DM II), Body mass index(BMI) 30-35, age 18-65 years, the existence of pancreatic reserve (peptide C >1), HB glycosylated >6, 5, and No contraindications for metabolic surgery. Our series are divided in two groups: A-Group 40 patients, the proximal gastric pouch was150-200cc; alimentary limb length was of 200cm, the common limb of 125cm. B- Group42 patients, proximal gastric pouch 100cc, alimentary limb 200cm, common limb 150c. The average operative time, 48 minutes, (range 35-75)
Results: One of our patients needs Insulin, 17 of theme needs oral antdiabetics, and the others don't need any treatment. The BMI at 6 months was28.9, at one year was 26, 6. Group A complications:- 2 cases of postoperative gastroplegia, one case of upper GI bleeding, 2cases of BMI inferior to 25, 6 cases of diarrhea (More than 3times daily). Within group B we don't have any complication for the time being.
Conclusion: The metabolic laparoscopic biliopancreatic diversion is a good alternative for the treatment of the DMII, associated to obesity (BMI 30-35). With small proximal gastric pouch, common limb of 150cm, we can minimize complications.

39
Laparoscopic Adrenalectomy; 6 Years Experience at King Hussein Medical Center

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Objective: To present our results in transperitoneal laparoscopic adrenalectomy after 6 years of experience.
Methods And Material:

Between July 2006 and Sept 2012, twenty four patients have underwent laparoscopic adrenalectomy at King Hussein Medical Center, for various benign adrenal disorders. All patients were referred from the Endocrinology department after they were fully evaluated by serum corticosteroid, urinary metanephrines, normetanephrines levels . Abdominal U/S and contrast enhanced CT-Abdomen was done for all patients for better localization of the affected gland. All the patients underwent transperitoneal laparoscopic adrenalectomy.

Results: Patients median age at time of presentation was 42 years, ranges between (17-50), 9 males and 15 females, 9 right, 14 left, and 1 bilateral. The mean operative time was 75 minutes (50-110), mean hospital stay was 4 days (2-7), mean intraoperative blood loss 70 ml between (30-150 ml) and mean post-operative analgesic needed was for 36 (24-48) hours. Oral nutrition was resumed on the 1st post operative day.

Post-operative complications occurred in four patients: one patient developed port site infection; one patient had atelectasis and one patient post-operative hypotension. All were managed conservatively.

Only one of the operations was converted to an open approach due to significant bleeding.

Mortality rate was zero.

Conclusion: Transperitoneal laparoscopic adrenalectomy is a feasible and effective procedure without any major perioperative complication. Laparoscopic adrenalectomy is the gold standard procedure for all benign adrenal disorders.

40
Pancreas Transplantation: Lessons Learned From a Decade of Experience at Wake Forest Baptist Medical Center

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Objectives: The article reviews the outcome of pancreas transplantations in diabetic recipients according to risk factors, surgical techniques, and immunosuppression management that evolved over the course of a decade at Wake Forest Baptist Medical Center

Methods: A randomized trial of alemtuzumab versus rabbit anti-thymocyte globulin (rATG) induction in simultaneous kidney-pancreas transplantation (SKPT) at our institution demonstrated lower rates of acute rejection and infection in the alemtuzumab group

Results: Alemtuzumab induction has been used exclusively in all pancreas transplantations since February 2009. Early steroid elimination has been feasible in the majority of patients. Extensive experience with surveillance pancreas biopsies in solitary pancreas transplantation (SPT) is described. Surveillance pancreas biopsy-directed immunosuppression has contributed to equivalent long-term pancreas graft survival rates in SKPT and SPT recipients at our center, in contrast to recent registry reports of persistently higher rates of immunologic pancreas graft loss in SPT. Furthermore, the impact of donor and recipient selection on outcomes is explored. Excellent results have been achieved with older (extended) donors and recipients, in recipients of organs from donation after cardiac death donors managed with extracorporeal support, and in African-American patients. Type 2 diabetics with detectable C-peptide levels have been transplanted successfully with outcomes comparable to those of insulinopenic diabetics. Our experiences are discussed in the light of findings reported in the literature.

Conclusion: In the past decade, a number of evolving trends have occurred in pancreas transplantation at our center

Hall C Session 1
Family & Emergency Medicine

41
ED Essentials on STEMI and non-STEMI
Martin Möckel MD (Germany)

The diagnosis of ACS bases on the history, ECG and cTroponin at admission; The following items will be presented and discussed during the lecture:

- the ECG needs to be qualified within 10min!
- Establish an alarm-plan for STEMI
- Send all NSTEMI and high risk UA to invasive diagnosis and PCI
- Evaluate all patients with non-diagnostic ECG, negative troponin at admission and low to medium risk on a CPU
- There is clinical need for further biomarkers:?

(1) For diagnostic purposes?
(2) For decision making („rapid rule-out")
Look out for news on biomarkers in the near future!

42
Pneumothorax: Current Concepts of Treatment
Tobias Lindner MD (Germany)

Current international guidelines concerning diagnostics and initial treatment of primary and secondary as well as traumatic pneumothorax in the ED are presented.

43
The Value of Triage in a Busy Emergency Department
Suleiman Abbadi MD (Jordan)

One of the main problems facing any hospital is how to manage the busy emergency department (ED), For the ED personnel have to re- act almost always and rarely to pro-act…because there is no way that they can know what the door will bring and have time to be ready for it, or what is the nature of the next presentation. And the principle of first come first served can't be applied to the ED patients
Triage is sorting patients who come to the ED according to their presenting signs and symptoms, so as to provide the needed care timely to those who need it by directing patients to the different areas of treatment in the ED which are staffed and equipped according to the type of care they are expected to render.
A large study was conducted at Prince Rashid hospital's ED between 1/1/2011 and 1/7/2012….over the period of 18 months all adult patients were triaged by a one of the senior registered nurses on duty and were sorted to one of 4 categories according to the seriousness of their illness…
As in other studies It is found that around one fourth of those who visit the ED actually need to be treated in the full capacity of the ED ,the rest can be treated in just one fourth of the space and by one fourth or less of the staff…provided there is good triage system…..it is probably good to call it the one fourth principle. (¼ patients need ¾ space and resources. ¾ patients need ¼ space and resources).
Once the triage scheme is applied properly all seriously ill patients are identified and directed immediately to the space where is designated to treat acute illnesses. And the rest don't have to wait until the staff finish with the acutely ill all categories are treated by the divided staff to deal with them at the same time. Details of the findings and the numbers in this study will be discussed in the presentations.

44
Shock to the Heart! Cardiac Monitoring after Electrical Injury
Julia Searle MD (Germany)

It is common practice to admit patients after low and high voltage electrical injury regardless of their symptoms and complaints and to monitor them over 24 hours in fear of late arrhythmias. We retrospectively analyzed hospital data from all patients who were admitted to a Berlin University hospital with electric injury over a period of eight years to investigate the occurrence of late arrhythmias.

45
Management of Cardiogenic Shock in the ED

Martin Möckel MD (Germany)

46
Health Care Quality and Patient Safety: New Trends and Strategies for Health Care Quality Improvement

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Objectives: Health care quality and patient safety is an important aspect. The purpose of the study is to evaluate healthcare quality projects in Health care quality and patient safety improvement.
Methods: The setting of the study is medical facilities of the Royal Medical Services which implemented healthcare quality projects; National Accreditation programs, Total quality management system, and internal clinical audit checklist. Health care quality improvement was evaluated; focused on overall satisfaction, patient experience, clinical practice guidelines and other evidence-based quality improvement.
Results: The study identified core values as, a New Model of clinical practices for development, research, education, partnership, and changes with great potential to transform the ability of the projects to improve the health care quality and safety. New Model of practice has the following characteristics: a patient-centered team approach; elimination of barriers to access; advanced information systems, including policies, procedures and clinical guidelines, redesigned, focus on quality, safety and outcomes. Health care quality measurements show that; there are improvements in patient and family satisfaction, employee satisfaction, as well as an improvement in the health care quality and patient safety.
Conclusion: Health care quality improvement projects are essential for continuous health care quality and safety improvement. Implementing New Model for health care quality is the process to integrate health care to good, better, best: moving toward health care quality and patient safety.

47
Medical Teams under Pressure in the Emergency Department

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Objectives: To identify key stressors for Emergency Department staff, investigate positive and negative behaviors associated with working under pressure and consider interventions that may improve how the Emergency Department (ED) team function
Methods: This was qualitative study involving semi structured interviews and questionnaires, Data were collected from staff working in the ED of the King Hussein Medical Center. Sampling method was employed to recruit staff from a variety of grades and included both doctors and nurses.
Results: Thirty staff members were included in the study .the most frequently mentioned stressors included congestion in the Emergency Department .staff shortage, excess workload, lack of teamwork. The study also revealed high levels of misunderstanding between companions of patients and staff ED Teams.
Conclusion: over load in the emergency department is a serious problem with many effects: low level of service provided to critical situations which affect of outcome of management, prolong the suffering and duration of waiting for patients and their companions, lack of patient satisfaction, decreased productivity of medical staff and increased work load on them with subsequent upset results, and increased violence and abuse cases on the medical staff.

Hall B Session 2
Family & Emergency Medicine

48
The Challenges Ahead for Global Primary Care and Family Medicine
Michael Kidd MD (Australia)

In countries around the world, strong integrated primary care is evolving and this presentation will focus on changes and challenges for family medicine in the areas of quality care, workforce recruitment, retention and training, strengthening of roles in mental health, addressing health inequalities, preventive care and health promotion, and the need to support primary care teams and new models of care to ensure that high quality primary care is available to all people in each of our nations.

49
A Reading in the Health Care Scene of Jordan
Mazen Al-Bashir MD (Jordan)

Jordan has a story to tell about its health care delivery over the last 60 years. With the recent changes in the social and political domains in the region; health care systems inevitably will face new set of challenges. There is a need to rethink positions, ways and means of health care delivery, to align health policies with the mission statement of the country, and with the efforts of the health workers on the ground

50
Hyperbaric Oxygen Treatment (HBOT) in Jordan; History And Facts
Jamil Elrefai MD (Jordan)

Hyperbaric oxygen is a new modality of treatment and the wrized as one type of alternative medicine, very sensitive for some diseases and special for others. Hyperbaric oxygen treatment was found for the treatment of caisson diseases, in the old history, which started from the French physician Junod who built the first hyperbaric chamber on1834.
Jordan is one of the first middle east countries in which started to use the hyperbaric chamber for diving accidents, and was developed to use this method of treatment in clinical practice; the first problem wound patient was treated on 1997, followed by many other treatments, as an adjuvant treatments with the other medical specialties.
On the recent years, many of Monoplace chambers was installed mainly for the treatment of children with C.P and autism. We found that HBOT is important to reduce the cost and the medical expenses in countries; HBOT is very important for all general hospitals, government and private type, to reduce the cost of the treatments for many kinds of illness.

51
Clinical Practice Guidelines in Family Medicine
Michael Kidd MD (Australia)

As family doctors we need reliable trusted information to support our decision making so that we provide our patients with the best possible clinical care and advice. Clinical practice guidelines can be an important source of advice for family doctors. This presentation will discuss the meaning of clinical practice guidelines in primary care, how we can make guidelines work for family doctors, and how we might use advances in technology to cope with a huge number of guidelines coming at us from different directions.

52
Elderly Patients in Family Practice: Polypharmacy and Inappropriate Prescribing in Jordan
Nada Yasein MD, Dr Farihan Barghouti, Dr Yaqoub Irshaid, Dr Ahmad Suleiman, Dr Diana Abu-Hassan, Dr Rana Tawil*
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Objectives: This study aims to evaluate the problems of polypharmacy and inappropriate medication use among elderly patients.
Methods: A total of 400 elderly patients 65 years of age attending the family practice clinic at Jordan University Hospital. All patients prescriptions taken over a period of 2 years or more were evaluated for the presence of polypharmacy and/or inappropriate medications use as determined by the updated Beers criteria 2003.

Results: Polypharmacy was found among 44.8% of the sample. Inappropriate medications as determined by Beers criteria independent of diagnosis accounted for 132 prescriptions for 118 (29.5%) patients, with the most frequent inappropriate drug being nifedipine. Considering diagnosis, the number of inappropriate medications was 28 prescriptions, with the most frequent one being the intake of non-steroidal anti inflammatory drugs in the presence of gastric or duodenal ulcer.
Conclusion: The frequency of polypharmacy and inappropriate medications use was relatively high. This highlights the need to educate the healthcare workers more about the issue of inappropriate prescribing for elderly patients.

53
Comparison Study of Arterial and Venous Blood Gases Values for Patients Admitted to Emergency Department at King Hussein Medical Center

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Objectives: The purpose of this study is to compare between the Arterial and Venous Blood Gas results and determine if peripheral venous blood gases values for PH, partial pressure of carbon dioxide (po2), Pco2 and HCO3 values accurately enough to replace them for clinical setting.
Methods: This prospective study was performed on 129 patients admitted emergency department of KHMC, from may to December 2011. Two samples were taken from each patient (arterial and venous) at the same time and after vital Sign were taking for all patients and tested by (NOVA Biomedical, USA) blood gas analysis.
Results: The 129 patients admitted the ER ranged in age from 16 -82 (mean 54.60) years, 98(76%) patients were male. There were a significant difference between ABG and VBG as the Correlation Coefficient (R^2) for PH, PO2, PCO2, HCO3 =0.40, 0.198, 0.71, 0.699 respectively in average 50% agreement between all Criteria of the test (PH,PO2,PCO2,HCO3). While in patients of Asthma the power of correlation for PH increased to be R^2= 0.70 and 0.64 in COPD Patients.
Conclusion: There were weakly correlations between the Arterial and Venous blood gas results. This is not accurately enough for clinical setting.

Hall C Session 3
Pediatric Surgery

54
Surgical Management of Neuropathic Urinary and Fecal Incontinence

John M. Park MD (USA)

Neuropathic urinary incontinence, in particular spina bifida, is a challenging problem whose solution requires a thorough understanding of lower urinary tract pathophysiology. The seminal concept of low-pressure storage and clean intermittent catheterizations (CIC) has laid the foundation for many surgical innovations. The University of Michigan has played a key role in the advancement of this field, namely Jack Lapides' observation of CIC, Edward McGuire's development of leak point pressure concept, and finally David Bloom's demonstration of external sphincter dilation for improving bladder compliance.
In order to achieve a satisfactory urinary continence, an adequate capacity and low-pressure reservoir must be obtained, along with competent outlet resistance and means to empty completely at an acceptable interval. Pharmacological agents to relax the bladder muscle and improve compliance continue to advance. Additional agents are also available forendoscopic delivery such as botulinum toxin. Augmentation cystoplasty using intestinal segments remains the gold standard for definitive improvement of bladder reservoir function, but decades of intestinocystoplasty have also shown several long term complications, including mucus production, stone formation, metabolic derangements, and malignancy. Tissue regeneration remains one possible hope for avoiding these complications, but unlike experimental animal models of normal bladder regeneration, human trials remain far from reality. In terms of augmenting the bladder outlet, options include bulking agent injection, bladder neck reconstructions, bladder neck

sling, artificial sphincter, and bladder neck closure. Creating reliable means to empty the bladder via CIC must be included in every surgical reconstruction plan. Mitrofanoff principle, where a supple, collapsible tube is implanted into the wall of a reservoir with an adequate submucosal tunnel, has stood the test of time in its reliability and durability. If the appendix is unavailable, a tubularized intestinal segment using the Yang-Monti technique offers an excellent alternative.
Surgeons play a key role in the management of fecal incontinence as well. For neuropathic patients suffering from fecal incontinence, regular bowel elimination using enemas is the most effective approach. To facilitate enema administration, Malone Antegrade Continence Enema (MACE) is an excellent surgical option. It may be created at either the cecal location using the appendix or the sigmoid colon using a Yang-Monti channel. The latter option reduces the enema time by 50% but is associated with more stomal complications.
The quality of life for patients struggling with neuropathic urinary and fecal incontinence has improved dramatically. Scientific innovations continue to pave the way for additional options. Surgery continues to play the critical role in the lifelong care of these individuals.

55
Lap-Assisted Endorectal Pull-Through for Hirschsprung's Disease

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Objectives: We would like to present our experience in primary laparoscopic assisted endorectal pull through (LAERPT) for the treatment of Hirschsprung's disease (HD) in infants and small children. This technique has gained popularity in the last decade or so.

Methods: Between May 2008 and Jun. 2012, 17 children with classic HD,1 child with short segment HD and 3 children with long segment HD were treated with primary LAERPT, by one laparoscopic team at Al-Hussein Hospital and Queen Rania Al – Abdullah Hospital for children. The ages ranged from 1 to 65 months The mean age was 2 months old and the follow up period was from 1 to 49 months. There were 16 males and 5 females. We used 3 ports(5,5&3mm).
Results: None needed to be converted to open surgery. There were no operative complications. The mean duration of surgery was 150 min. All patients had smooth and rapid recovery. Feeding was started on the 1st postoperative day and our patients passed motion on the 2nd or 3rd postoperative day. The scars had cosmetic appearance and barley, could be seen. One male infant developed severe anal stricture which required long term dilatation and he also, had one attack of moderate entero–colitis which responded well to conservative treatment. One female infant developed moderate anal stricture which required long term dilatation. One male infant developed mild anal stricture which required short term dilatation. Another male infant developed one attack of mild entero–colitis which responded quickly to conservative treatment. The overall functional outcome was good with no soiling, stool incontinence or constipation.
Conclusion: This procedure is minimally invasive. The perioperative complications are minimal.The surgical technique can be learned easily. One stage laparoscopic pull through operation avoids the additional anesthesia, surgery and the complications of a first step colostomy. The laparoscopic technique is safe,efficient,has speedy recovery, of superior cosmoses and the blood loss is minimal.

56
Laparoscopic and Laparoscopic Assisted Pyeloplasty for Repair of Pelvi-Ureteric Junction Obstruction in Children

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Objectives: To evaluate our experience in transperitoneal laparoscopic & laparoscopic assisted pyeloplasty in children with pelvi-ureteric junction (PUJ) obstruction. We review the safety, efficacy, outcome parameters of operative time, analgesic requirement, and hospital stay. We present the follow up protocol and complications
Methods: A retrospective study of 68 transperitoneal laparoscopic and laparoscopic assisted pyeloplasties in children were performed at King Hussein Medical Center and Queen Rania Hospital for Children over 3 years (May 2009-2012). The indication for pyeloplasty was kidney obstruction with deterioration of renal function on isotope renography and ultrasound The patients were placed in a lateral position with three working ports, one 5mm and tow 3mm ports. The PUJ was resected and the anastomosis made using 6/0 and 5/0 absorbable sutures, laparoscopic assisted pyeloplasty done in 50 patients, 18 patients underwent reduction of the huge renal pelvis. JJ stent was inserted by laparoscopy and laparoscopic assisted maneuver in 64 patients. Perianastomotic drain was placed for 2 days in 15 patients. Bladder catheter was inserted in all patients for 24-48 hours. Follow-up included clinical assessment, functional assessment by ultrasound and isotope renography after removing the JJ stent at 2 and 6 months.
Results: The patients included 30 females and 38 males; the mean age was 4 years (range 2 months -12 years). Right sided pyeloplasty was performed in 28 patients while the other 40 patients had left sided pyeloplasty. An aberrant crossing vessel was found in 12 patients, one patient had bilateral pyeloplasty for crossing vessels. Mean operating time for the totally laparoscopic pyeloplasty was 200 min (range 120-400 minutes), while for the laparoscopic assisted pyeloplasty was 70 minutes (range 50-95 minutes), P value(<0.05) In our series, one patient had simultaneous laparoscopic cholecystectomy, one patient had bilateral inguinal hernia repair, one patient had laparoscopic nephrectomy, 2 patients had contra-lateral ureteric reimplantation and one patient had bilateral laparoscopic assisted orchidopexy. The mean hospital stay for all patients was 3 days, range from 2 to 5 days. There were no intra-operative or post-operative complications. There was no need for conversion to open pyeloplasty. Blood transfusion was not required in any case and there were no mortalities. All patients showed improvement of renal function after removal of JJ stent by ultrasound and isotope scan.
Conclusion: Transperitoneal laparoscopic and laparoscopic assisted pyeloplasty in children is a feasible and safe technique. The operation times in children reduced by experience. The length of hospital stay and convalescence is short and hence rapid return to normal activity is expected with less analgesia requirements however, the laparoscopic pyeloplasty is more difficult and the operative time remains longer than open pyeloplasty, while the laparoscopic assisted pyeloplasty operative time is even less than the open procedure. Follow-up examination verified perfect cosmetic and functional result with excellent patients and family satisfaction

57
Vesicoureteric Reflux in Children: Experience at King Hussein Medical Center

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Objective: We review our thirteen year's experience (1997 and 2009) with surgical treatment of 334 patients with

vesicoureteric reflux (VUR) at King Hussein medical center, pediatric surgery section.

Patients and methods: All files of 334 patients who underwent intravesical cross-trigonal uretric reimplantation for VUR, between January1997 and December2009 in our hospital were reviewed.
Demographic details, reflux grade, bilaterality, radiological investigations, surgical approach and outcome were analyzed.

Results: 334 patients with VUR (grade II to V) underwent uretric reimplantation during the study period. 47.6% of the patients were males and 52.4% were female. The patients were between two and a half months to fourteen years of age. 11.7% were less than one year of age and 61% <5years. 294(88%) of the patients were classified as primary VUR and 40(12%) as secondary. The duration of follow up was from 8 months to 13 years. Persistent VUR requiring re-do ureteral reimplantation in 18 (5.4%) cases, and nephrectomy due to end- stage renal disease (ESRD) were performed in 33 (9.8%) patients. Successful rate was achieved in 90.2% of cases.

Conclusion: VUR is common in children and must always be suspected in those presenting with urinary tract infection and in those with urological abnormalities. Surgery in early infancy carries a high risk of severely damaging bladder function; all patients with reflux should be monitored regularly for life; the risk of kidney related problems may still exist.

58
Pediatric Urolithiasis: Incidence and Surgical Experience at King Hussein Medical Center

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Objectives: We report our experience with open surgery for urolithiasis in pediatric population as the primary line of treatment and to determine the frequency and location of urinary stone in the urinary tract system. Other surgical procedures are needed in the treatment of urolithiasis in children
Methods: A retrospective review was performed for all patients underwent open surgery from 1997 until 2009 at King Hussein Medical Center, pediatric surgery division. They were 74 patients (19 girls and 55 boys), aged 3 months to 13 years. Records were reviewed in a study with a regard to age, sex, location of stone, morbidity, associated abnormalities, surgical approach and outcome
Results: During the study period, 74 open stone operations were performed in our hospital. The mean age of the patient was 3.6 years, 19(25.6%) patients were female. Nephrolithiasis was found in (24.3%) infants patients. The stone were in the kidneys in 46(62%) patient, in the ureter in (12%) and, the bladder in (25.6%). Associated urogenital abnormalities were detected in four cases, including ureteropelvic junction obstruction and anatomic urinary bladder abnormality
Conclusion: Stone may need to be removed by a pediatric surgeon. The use of ESWL and endourological **method**s of treatment for urolithiasis in children must be generalized. Surgical approaches to urolithiasis in children continue to evolve, with open surgery being reserved for particular and complex cases

59
Oral Antibiotic Post Stented Hypospadias Repair: Is There Any Role in the Prevention of Urinary Tract Infections?

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Objectives: To evaluate the role of oral antibiotic post stented tubularized incised

urethral plate urethroplasty (TIPU) in prevention of bacteriura and urinary tract infections.
Methods: A prospective study done on 40 pts who had stented TIPU for coronal hypospadias;between jan 2008 and Dec 2010, done at karak hospital. average age at surgery was 13.2 months. Pts where divided into 2 groups; group A: involved 20 pts were kept on oral AB until urethral catheter removal; while group B: 20 pts had no oral AB post operatively.
Results: The 2 groups were followed for 3 years. Urethral catheter removed after 8 days post operatively in the two groups. In group A pts were kept on oral AB as long as the catheter in. Co-trimoxazole in syrup form were selected as an oral AB; given in two divided doses. For each pt at time of stent removal and after 3 weeks later urine sample was sent for analysis and culture. 3 pts (15%) from group A had bacteriuria; and all have negative urine culture, while in group B 8 pts (40%) had bacteriuria (P Value < 0.05) ; and 3 pts had positive urine culture for E-coli which were sensitive to Co-trimoxazole. Non of the pts from the 2 groups had febrile UTI.
Conclusion: Using oral AB post stented TIPU will significantly reduces bacteriuria and positive urine culture.

60
Inverted Y on V Meatourethroplasty for Distal Penile Hypospadias: Our Experience at Queen Rania Al-Abdullah Hospital for Children

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Objectives: The aim of this study is to evaluate the patient with Distal Penile Hypospadius who treated with this technique regarding success rate, complications and cosmesis.
Methods: Retrospective study was carried out at Queen Rania Hospital for Children from April 2010 to June 2012. A 44 patient with distal Hypospadias without chordae underwent Inverted Y on V Meatourethroplasty. Age of patient ranged from 1.5 to 8 years. Mean age is 4.5 years.
Results: Patients were followed up to date. In 33 patients (75%) have excellent result without any complications and excellent cosmetic results , while complications were seen in 11 patients, retracted meatus in 6 cases (13.6%), fistula in 4 (9%), complete disruption in 1 case (2.3%).
Conclusion: Inverted Y on V Meatourethroplasty can be used successfully for Distal Penile Hypospadius repair with excellent cosmetic results, complication rate still acceptable but we still need further evaluation and more experience for this technique. Hypospadias, Meatourethroplasty, Complications.

61
Laparoscopic Treatment of Ovarian Cysts and Masses in Children

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Objectives: Background:
Laparoscopic approach is considered one of the current options for the management of several surgical conditions in children. The aim of this study is to present the laparoscopic treatment of ovarian cysts & masses in children, feasibility, safety and outcome
Methods: Patients and methods: This retrospective study was conducted at Queen Rania Hospital for Children. A total of 12 patients aged between 5 days and 12 years (mean age 3.5 years) with ovarian cysts were treated by laparoscopy between May (2008 -2012). Patients were evaluated with respect to operative time, the need for conversion to open surgery, any intraoperative and/or postoperative complication, pain assessment using Wong-Baker FACES Pain Rating Scale, total hospital stay, and final cosmetic outcome. All patients had tumor maker assessment prior surgery (B-HCG, AFP).
Results: Simple ovarian cyst, not complicated, and larger than 5 cm was encountered in 6 patients. Mixed cystic

and solid parts were present in two patients. In another 4 patients, the cysts were complicated by torsion. Three cysts were giant (15 x 17 x 20 cm), 3 liters of clear fluid were aspirated from one cyst. Operation time range from 40 to 90 minutes, (mean of 56minutes). Extension of the umbilical port was needed in 2 patients for the extraction of ovarian cysts containing a solid tumor component inside and no conversion to open surgery. Mature teratoma was encountered in 2 patients. Laparoscopic contra lateral oophoropexy was performed in 4 patients who had torsion. Duration of hospital stay was 1–2 days, (mean of 1.66 days) . There were no intraoperative or postoperative complications, the cosmetic outcome was excellent.

Conclusion: Laparoscopic management of ovarian cysts & masses in children is feasible, safe and effective with less hospital stay, less pain and no complications.

62
Laparoscopic Fundoplication for Thoracic Stomach and Achalasia in Children

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Objectives: To evaluate our preliminary experience in laparoscopic fundoplication for thoracic stomach & achalasia in children, acceptability ,safety, efficacy, outcome parameters of operative time, analgesic requirement, postoperative stay and complications.

Methods: A retrospective study of 9 laparoscopic Niseen fundoplications for thoracic stomach with GERD and 3 esophageal myotomies & Thall fundoplications for achalasia in children were performed over the past 4 years at King Hussein Medical Center & Queen Rania Hospital for Children. We used the Enseal vessel sealing device and hook diathermy for dissection and division of short gastric vessels and excision of the hernia sac.

Results: The patients included 4 females and 8 males, the mean age was 4 years (range, 2-9). The indications for surgery were thoracic stomach and Barret esophagus due to (GERD), other indications were severe esophageal ulceration, stricture, recurrent bleeding, para-esophageal hernia and recurrent aspiration pneumonia. One patient had previous repair of esophageal atresia and 3 patients had achalasia underwent laparoscopic esophageal myotomy ad Thall fundoplication. Mean operating time was 160 min (range 120-240 minutes). The mean hospital stay for all patients was 2 days, range from 1 to 4days.There were no intra-operative and post-operative complications. No conversion to open fundoplication was required. One patient had laparoscopic gastrostomy insertion in addition to Nissen fundoplication. Blood transfusion was not required in any case and no mortality.

Conclusion: Laparoscopic fundoplication for thoracic stomach & achalasia in children is rapidly becoming the procedure of choice for surgical correction because of the advantages of reduced discomfort and decreased hospitalization. It is a feasible and safe technique. Laparoscopic fundoplication operation times in children reduced by experience. The length of hospital stay and convalescence is short and hence rapid return to normal activity is expected with less analgesia requirements. Follow-up examination verified perfect clinical, radiological and endoscopic findings. The cosmetic, endoscopic and functional result was excellent with very good patients and family satisfaction.

Hall C Session 4
Pediatric Surgery

63
Use of Oral Mucosa Graft for Complex Hypospadias Reconstructions

John M. Park MD (USA)

Complex hypospadias reoperation is one of the most formidable reconstructive challenges in pediatric urology. The scarcity of healthy, well-vascularized local tissue

makes it difficult to create a functional neourethra as well as provide a robust cutaneous coverage of the penile shaft. Oral mucosa grafts have been utilized with increasing frequency in the past two decades due to the ease of harvest, favorable surgical tissue characteristics, and theoretical long-term durability as a fluid conduit material. In both adult and pediatric urology, it has become the tissue of choice for many surgeons who perform complex urethral reconstructions. Humby was the first to report the use of oral mucosa in 1941, but somehow the best reconstructionists remained ignorant of this innovative technique for more than 40 years until it was rediscovered and resurrected in Italy and France. The next set of reports appeared in early 1990s, and since then, the use of oral mucosa has increased steadily in both adult and pediatric urethral reconstructions.

The University of Michigan was one of the earliest centers in North America to implement this technique. As of 2008, we have performed 81 oral mucosa urethroplasty procedures in patients with either complex hypospadias or previous hypospadias failures. The median age at the time of procedure was 8.0 +/- 10.2 years, and the mean follow-up at the time of analysis was 4.7 +/- 3.9 years. Most patients in this series had undergone previous reconstructive penile or urethral procedures. Prior urethral repair for hypospadias had been done in 93%. Only 5 patients (7%) had no prior penile or urethral surgery. Tube grafts were utilized in 17%, while onlay grafts were used in 83%. 56% resulted in no complications and required no further interventions. The most common urethral complication was meatal stenosis, followed by urethral stricture and urethrocutaneous fistula. The type of reconstruction technique tended to affect the complication pattern. Tube grafts were significantly more likely to have complications than onlay grafts (85% vs. 46%, p=0.011). Another factor associated with occurrence of complications was prior penile or urethral surgery.

Accumulating clinical evidence continue to affirm that oral mucosa graft is an outstanding tissue material for complex urethral reconstructions. Unlike keratinizing squamous epithelium that may produce long-term problems such as fibrosis and hair-bearing urethra, we believe that oral mucosa-lined neourethra will likely be durable as a urinary conduit. Oral mucosa is favorable because of its highly proliferative and reparative capacity, and it will remain an important technique in our surgical armamentarium.

64
Laparoscopic Transperitoneal Extra-Vesical Ureteric Reimplantation for Vesicoureteric Reflux in Children

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Objectives: Laparoscopic treatment of vesicoureteral reflux (VUR) is still in its beginning. We report our initial experience in the treatment of VUR by laparoscopic transperitoneal extravesical approach (LTEA), to describe the evolution and to evaluate the safety, efficacy, results and benefits of this technique for these patients using the three-port minilaparoscopic nerve-sparing extravesical ureteral reimplantation.

Methods: A retrospective study was conducted at Queen Rania Hospital for Children / KHMC. Over the past 2 years, 96 renal units in 68 children (40 females and 28 males) with VUR and deterioration of renal function on isotope renography with scar formation and recurrent UTI (52 unilateral and 22 bilateral were treated with minilaparoscopic nerve sparing extravesical ureteral reimplantation for VUR .. A 30-degree 5-mm telescope and two 3-mm trocars were used for the reimplantation. Minimal handling and dissection of the ureter and ureterovescial junction was adhered to spare the nerves and to avoid injury to the vas or female internal organs. The Foley catheters were removed within 24-48 hours after surgery. Mean follow-up period was 4 months. Renal and bladder US prior to discharge at 2 days and after one week, MAG3 scan

at one month for non stenting cases or 2 weeks after removing the JJ stent .Voiding cystourethrography (MCUG) was done 2 months after surgery.

Results: A total of 96 ureters were reimplanted (52 unilateral and 22 bilateral). The mean age was 43 months (range, 7-144) months. The mean surgical time was 50 (35-90) minutes in unilateral and 110 (90-150) minutes in bilateral VUR. There was no intraoperative complication or conversion to open surgery. All patients resumed oral intake in the first postoperative morning.. None of them had urinary retention after catheter removal.. A complete resolution of reflux was identified in 82 of 96 units, a downgrading of reflux in 8 units. Ureterovesical junction stenosis was encountered in 2 patients resolved by balloon dilatation and JJ stent. Six patients (8 renal units) still waiting MCUG to assess the results. seven patients had simultaneous laparoscopic contra-lateral nephroureterectomy for non functioning kidney; one patient had laparoscopic cholecystectomy, laparoscopic right ureteric reimplantation & laparoscopic JJ stent insertion and Left nephrectomy for non functioning kidney.

Conclusion: Laparoscopic transperitoneal extravesical approach in the treatment of VUR using three-port minilaparoscopic nerve-sparing technique is safe and effective for the treatment of unilateral and bilateral VUR resulting in a shorter hospital stay, less postoperative discomfort, and reduced recovery period compared to open surgery , with a low morbidity to resolve the VUR with success rates similar to the open technique

65
One Port Mini-Laparoscopic Inguinal Herniotomy in Children

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Objectives: To evaluate the application of Modified One Port MiniLaparoscopic Repair of the Indirect Inguinal Hernia In Infants and Children.

Methods: Through november 2010 to june 2012 , 16 children with Indirect inguinal hernia, (15 females,1 males). Were treated by one port (3mm) mini-laparoscopic surgery, using (16.F) spinal needle and (2-0) prolene ties. From the total cases ,12 children had unilateral indirect inguinal hernia,and 4 children had bilateral inguinal hernia, Among those unilateral hernia contralateral hernia was found in 2 children. all patients underwent purse-string high ligation of the internal ring laparoscopicaly.

Results: the range of operative time was(8-20)minutes and the mean time was about 10 minutes for unilateral inguinal hernia and (22-27)minutes for bilateral inguinal hernia in a mean of 24 minutes. all patients were successfully operated laparoscopically using one port for telescope except in two, the first one has bilateral inguinal hernia and developed small extra-peritoneal hematoma on both sides which makes unclear visualization of the internal ring, and the decision was taken to convert the procedure to open technique, the other child has irreducible inguinal hernia and small bowel loop was stucked to the inguinal canal and it was converted to 3 ports laparoscopic surgery. No recurrence or other serious complications occurred after (1-18)months follow up.

Conclusion: One port mini-Laparoscopic high ligation of the internal inguinal ring for indirect inguinal hernia in children is a safe, effective minimally invasive and simple technique with better cosmetic results and fast recovery and may be generalized in the future.

66
Prescrotal Orchiopexy for Palpable Undescended Testicle: Initial Experience and Comparison with the Standard Inguinal Approach

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Objectives: To review our initial experience with prescrotal orchipexy (PSP), and compare it with the standard two incision inguinal approach.
Methods: A retrospective charts review of 135 pts who had surgery for undescended testicle (UDT) between Jan 2008 to Dec 2011 at Karak Hospital. 39 pts excluded; 4 had intra-abdominal testicle, 15 had testicle at internal ring, and 20 pts lost follow up. Our study involved 96 pts. According to surgical approach, pts divided into 2 groups. Group A:72 pts had standard two incision inguinal orchiopexy, group B:24 pts had single incision PSP. A comparison done between the 2 groups in regard of surgical cutting time, cosmetic appearance and complications. Peroperatively all pts were evaluated at clinic and re-examined after induction of anesthesia.

Results: Average age at surgery was 3,2 years. Mean follow up duration 13 months. Average surgical time in group A was 56 minute while in group B was 32 minute, by using Chi-square and beta density function the P value were calculated to be less than 0.05 which is significant for time difference between the two surgeries. From group A 59 pts had associated hernial sac. while in group B 19 pts had associated hernial sac; that ligated close to internal ring. One pt from group A had wound infection at scrotal incision due fecal soiling. None of the pts who had a prescrotal incision need any other incision higher or lower. A prescrotal incision didn't leave any apparent scars later in-compared with the two incisions orchiopexy.

Conclusion:
PSP is a safe, short duration , good alternative, and better cosmetic appearance from standard ingiunal orchiopexy for palpable UDT.

67
Utilizing Laparoscopy for Anorectal and Colonic Conditions in Children

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Objectives: To present our surgical experience using laparoscopy in anorectal malformations and colonic conditions in children
Methods: between April (2008 – 2012), 45 patients with anorectal malformation (ARM) and colonic conditions were managed by laparoscopy. The patients, 28 males and 17 females aged from 6 months to 14 years (mean age, 52 months), 13 patients had ARM ,10 males had rectourethral fistula, one female had rectovaginal fistula and 2 had cloacal anomaly, 12 patients were treated with colostomy in the newborn period followed by a delayed laparoscopic assisted anorectal pullthrough. The female with rectovaginal fistula had the surgery without colostomy. Laparoscopy included stimulation of the puborectal muscle, using a Peña electrostimulator at the perineum watching the muscle contraction from out side and by laparoscopy from inside
Results: In all ARM cases the laparoscopic assisted procedure was successful, dissection of the rectum and ligation of the rectourethral fistula, then rectal pull through to the new position after identification by muscle stimulation, the other colonic conditions were treated successfully by laparoscopy. The 2 patients with cloaca had one stage laparoscopic assisted cloacal pull through. Tow patients had laparoscopic repair of sigmoid injury due to trauma without colostomy, 4 patients had one stage laparoscopic total proctocolectomy for FAP, 2 patients had laparoscopic colonic biopsy and Maloney procedure for colonic irrigation, one

patient had laparoscopic and endoscopic assisted sigmoid polypectomy and 24 patients had laparoscopic assisted trans –anal pulthrough for Hirschsprung's disease (HD). There was no conversion to the open technique, there were no major complications and no mortality, 2 patients had anal stenosis which responded to anal dilatation and posterior rectal strip myomectomy.

Conclusion: Although longer follow-up to evaluate continence is to come, laparoscopic assisted anorectal pull-through should be considered for the correction of the high imperforate anus in both genders, and, according to our experience, it represents the gold standard. It offers the advantage of good visualization of the fistula and the surrounding structures with less trauma to the abdominal wall and perineum. With the laparoscopic Peña stimulator the direct observation of the contraction of the puborectalis sling allows an evaluation of the functional contractility and an accurate colonic pullthrough in the center of the muscle complex. Laparoscopy can be utilized safely for surgical management of HD, FAP, diagnosis and treatment of bowel injury.

Hall D Session 1
Symposium 1
World Federation of Hemophilia

68
Thrombophilia: the Promotion of Blood Clotting

Bernadette Garvey MD (Canada)

The term thrombophilia is used to describe a hereditary or acquired condition associated with a tendency to thrombosis. Thrombosis is a common disorder: for example, approximately two million people in the USA will develop deep vein thrombosis (DVT) annually. More than 150 years ago Virchow recognized that thrombosis was potentiated by stasis, vascular injury or abnormalities of the blood. While the first two have long been understood, over the past few years, using genetic and epidemiologic methods, we have become familiar with a number of inherited and acquired disorders of the blood that alone or in combination with other factors may lead to a thrombotic tendency. The role that these factors play in thrombosis, however, is not always well defined and controversies exist regarding the need to perform laboratory screening investigation in many of these cases, as well as in the need for, and duration of, anticoagulation in at-risk individuals. The prophylaxis and management of thrombosis has always revolved around two main anticoagulants: heparin and warfarin. Recently, a group of newer anticoagulants have become available and their role in prophylaxis and long-term management of thrombotic disorders has yet to be clearly defined. The factors leading to the thrombophilias and their management will be discussed.

69
Rare Bleeding Disorders

Flora Peyvandi MD (Italy)

Rare bleeding disorders (RBDs) represent 3% to 5% of all inherited coagulation deficiencies, and are usually transmitted as autosomal recessive traits. They include inherited deficiencies of fibrinogen, factor (F) II, FV, FVII, FX, FXI, FXIII, and combined FV and FVIII deficiencies (FV+VIII). The global distribution of RBDs is variable with a prevalence ranging from approximately 1 in 2 million for FII and FXIII deficiencies to 1 in 500,000 for FVII deficiency.

International efforts aim to better identify the number of affected individuals throughout the world, to define the clinical manifestations associated with these disorders and to share diagnostic and treatment expertise. FVII and FXI deficiencies are the most prevalent RBDs, followed by fibrinogen, FV and FX, FXIII and FV+FVIII deficiencies while the rarest disorder was FII deficiency. It is not possible to define a clear bleeding pattern among patients with RBDs, as symptoms are varied and heterogeneously distributed, but on the whole bleedings that endanger life appear to be less frequent than in haemophilia. The most typical symptom, common to all RBDs, is the occurrence of excessive bleeding at the time of invasive procedures, as well as mucosal tract bleeding episodes such as epistaxis and menorrhagia. The laboratory diagnosis of RBDs is currently carried out by means of coagulation screening tests, such as the activated partial thromboplastin time (APTT), the prothrombin time (PT) and the thrombin time (TT), applied to

subjects reporting a clinical and family history of bleeding. Abnormal results of screening tests are followed by the specific coagulation assays, in order to make the specific diagnosis of a RBD. Molecular diagnosis is based on the search of mutation in the genes encoding the corresponding factors.

Treatment of RBDs is also a difficult task, since information on the clinical management of RBDs is often scarce. The patients' personal and family history of bleeding are important guides for management. The main treatments in RBDs are represented by non-transfusional adjuvant therapies and replacement therapy of the deficient coagulation factor. However, evidence-based guidelines for the diagnosis and management of this patient population are still lacking.

With these limitations in mind we established an International network of treatment centers to report clinical, laboratory (phenotypic and genetic) and therapeutic information. The first report from 495 european patients were analyzed. There was a strong association between coagulation factor activity level and clinical bleeding severity for fibrinogen, FX, FXIII, and FV+VIII deficiencies. A weaker association was present for FV and FVII deficiencies, whereas no association was present for FXI deficiency. In addition levels not associated with spontaneous major bleeding were highest for FXIII deficiency, followed by FV+VIII, FVII, FX, and FV deficiencies. For fibrinogen deficiency, a factor activity level of 20 mg/dl is needed to ensure absence of major spontaneous bleeding. Thus, these data prove a heterogeneous relation between coagulation factor activity level and clinical bleeding severity in RBDs. Results from this study call for further work directed to allocate suitable preventive and management strategies for this patients population.

70
Menorrhagia and Bleeding Disorders: Management Options

Rezan Abdul- Kadir MD (UK)

Menorrhagia (heavy menstrual bleeding) is a common gynaecological problem and has a major impact on women's general health and quality of life. Actual menstrual blood loss (MBL) can only be measured precisely by alkaline haematin method to extract its haemoglobin content. This is a sophisticated laboratory test and not practical for clinical use. Pictorial blood assessment chart (PBAC) is a simple clinical tool that can be used to assess the blood loss and monitor response to treatments. Heavy menstrual bleeding can be a symptom of an underlying bleeding disorders and haemostatic evaluation should be considered in women with HMB. However, full haemostatic screen is neither necessary nor feasible for all women presenting with HMB. The use of PBAC score as well as bleeding score helps identify women who are more likely to benefit from screening for bleeding disorders. Iron deficiency anaemia is commonly associated with HMB. Early detection and treatment of iron deficiency is important aspect of the management. Treatment options for HMB include haemostatic, hormonal and surgical options. The choice is dependent on the woman's age, her reproductive wishes, the side effect profile and availability of the treatment options. Close collaboration between Gynaecology and haematology teams is essential for optimal care for women with bleeding disorders presenting with HMB.

71
Home Treatment In Haemophilia

Assad Haffar MD (Canada)

Early treatment with replacement therapy is an important key factor in stopping the bleeding, minimizing complication and returning of the affected joint or area to normal as early as possible. In order to be able to treat early, it advisable to give each hemophilia few vials of Clotting Factor Concentrates (CFCs) to keep them at his residence in order to start treatment as soon as a bleed starts. This is what is known as Home Treatment or Home Therapy which is essential in prophylaxis and has a lot of benefits in addition to the concept of early treatment.

Hall D Session 2
Symposium 1
World Federation of Hemophilia

72
ITP: Unclear Terminology, Uncertain Etiology, Arguable Management
Bernadette Garvey MD (Canada)

Classically, autoimmune thrombocytopenia is a bleeding disorder in which autoantibodies are directed against an individual's own platelets. Antibody-coated platelets are removed by the Fc receptor-bearing reticuloendothelial cells in the spleen or liver. Cells may also be removed by complement-mediated cytolysis.

In some instances, the stimulus for antibody production is known (e.g. viral infections in childhood-type acute ITP); in most cases, however, the trigger for production of the antibody is unknown, particularly in chronic ITP, the common presentation in adults. There has been much research on the characterization of the autoantibodies. They are known to be directed against glycoproteins on the platelets surface, most commonly GPIIbIIIa. There have been several studies which indicate that cellular immunity is also involved in ITP pathogenesis i.e. T-cell and cytokine abnormalities and cytotoxic T-cells may also be responsible for destruction of platelets. While destruction of the peripheral blood platelets remains the major cause of thrombocytopenia, there is also evidence demonstrating the role of suppression of megakaryocytes in this disorder. Autoantibodies may be directed against the glycoprotein antigens on the megakaryocytes, leading to marrow suppression, decreased ploidy and apoptosis.

While a relatively common disorder, ITP is often asymptomatic, but may be associated with serious hemorrhagic complications. A knowledge of the specific pathogenesis of ITP is essential to the development of optimal therapy. A number of therapies have proven to be effective, including prednisone, immune modulation, intravenous immunoglobulin (IVIG), anti-D, splenectomy, rituximab and TPO receptor agonists.

73
Thrombotic Thrombocytopenic Purpura (TTP) Treatment
Flora Peyvandi MD (Italy)

Thrombotic thrombocytopenic purpura (TTP) is a rare and life-threatening syndrome, typically occurring in previously healthy individuals, characterized by thrombocytopenia and microangiopathic haemolytic anaemia due to platelet rich-thrombi in the microvasculature of different organs, which cause ischemic injury.

The pathophysiological mechanism of TTP was elucidated in the past decades, when ADAMTS13 (A Disintegrin And Metalloprotease with ThromboSpondin-1 repeats) was discovered and demonstrated to cleave ultra-large von Willebrand Factor (UL-VWF) multimers, reducing their size and, consequently, their platelet-adhesive properties.

TTP is often associated with ADAMTS13 deficiency, that can be either genetic or, more commonly, autoimmune. Congenital TTP is a rare autosomal recessive condition (accounting for about 5% of all cases) due to mutations in the ADAMTS13 gene, most commonly in compound heterozygosity. Different ADAMTS13 mutations have been found to determine different amounts of residual plasmatic activity of the protease, which inversely correlate with the clinical severity of the phenotype (age at onset, frequency of recurrence). The acquired form of TTP accounts for the majority of clinical cases and is often due to anti-ADAMTS13 antibodies that inhibit the cleaving activity of ADAMTS13 and/or bind to the protease and accelerate its clearance from plasma. The acquired form can be idiopathic or associated with different conditions (secondary forms) as pregnancy, infections, autoimmune diseases, neoplasm and the use of drugs such as thienopyridines and chemotherapeutic agents. Once TTP has occurred, it can recur in approximately one third of acquired cases (chronic recurrent disease).

Management of patients with suspected TTP is difficult because the diagnostic criteria are not specific. The diagnosis of acute TTP is still based on clinical features and ADAMTS13 testing, although useful in the differential diagnosis and to predict the risk of recurrence, is not considered

essential nor for the diagnosis or to start treatment.
Patients affected by congenital TTP should be treated with plasma infusion, while plasma exchange remains the cornerstone of the current management of acute acquired TTP, associated with immunosuppressive therapy (such as corticosteroids and Rituximab) to reduce autoantibodies production. New therapeutic agents, which target the inhibition of VWF-platelets interaction are under evaluation as adjuvant treatment to patients with acquired TTP.

74
Women with Inherited Bleeding Disorders – Reproductive Choices

Rezan Abdul- Kadir MD (UK)

Inherited bleeding disorders are life-long conditions that can present potentially debilitating musculoskeletal bleeding and life threatening intracranial haemorrhages. Despite advances in their treatments, they remain incurable and are commonly associated with significant long-term morbidity. Women with inherited bleeding disorders can pass on the gene defect to their offspring and therefore are at risk of having an affected child depending on the inheritance pattern of the condition. The decision regarding reproduction is fundamentally complex and challenging and further complicated for these women due to their genetic risks. Developments in molecular genetics and technologies have created new opportunities and expanded the reproductive options for these women. In this presentation, reproductive choices of women and families with inherited bleeding disorders will be discussed. Current options for prenatal diagnosis will be explored including the factors that influence the uptake of these options. Ongoing research in the field as well as future development will also be discussed.

75
A Proposed Model of Prophylaxis in Patients with Haemophilia Type A in Jordan

Samir Faouri MD (Jordan)
Abdallah Awidi, Bassem Keswani, Sleiman Sweedan, Musa Barqawi, Nazzal Bsoul, Isam Haddadin, Mustafa Falah, Ahmad Telfah, and Arafat Awajan.

Severe Haemophilia A is a debilitating disease that causes recurrent hemoarthrosis, leading to hemophilic arthropathy. Data from several studies demonstrated that prophylaxis strategy utilizing Factor VIII is effective in reducing recurrent bleeding, including life-threatening bleeds, arthropathies, and improving the quality of life for patients with haemophilia A. The prophylaxis adoption rate has been relatively low due to the lack of early prospective randomized clinical trials, as well as different dosing regimens used and cost issues. However, most recently conducted clinical trials confirmed the benefits of the prophylaxis strategy over the on-demand treatment. In Jordan, like other developing countries, there is no standardized prophylaxis protocol in place for patients with haemophilia A due to unresolved issues with regimens, cost and dosing schedules of factor VIII. The Haemophilia Working Group has undertaken the initiative to review the available data, resolve any outstanding issues, and develop a prophylaxis model according to different priority groups of patients that can be adopted by healthcare institutions on a national level.

Hall D Session 3
Neurosurgery & Neurology

76
Transpetrosal Approaches to the Skull Base

Luis A. B. Borba MD (Brazil)

77
Differential Diagnosis of Parkinsonism

Niall Quinn MD (UK)

According to the Queen Square Brain Bank diagnostic criteria for Parkinson's disease (PD), step 1, the presence of parkinsonism, requires bradykinesia, defined in the criteria as including progressive fatiguing and decrement of repetitive movements. Two conditions often misdiagnosed as PD – essential tremor (ET) and adult onset dystonic tremor- do not even pass step 1, nor do most cases of so-called vascular parkinsonism.
What we have traditionally called PD has always been clinically heterogenous.
In recent years five monogenic causes of "PD" have been identified:- two dominant

(alpha-synuclein and LRKK2) and three recessive, usually causing young onset "PD" (Parkin, PINK1 and DJ1). In addition heterozygotes for the recessive Gaucher's disease with glucocerebrosidase gene mutations have an increased risk of PD.
The three main neurodegenerative diseases mistaken for PD are the alpha-synucleinopathy multiple system atrophy (MSA), and the tauopathies progressive supranuclear palsy (PSP) and corticobasal degeneration (CBD).
Dopamine receptor blockers or dopamine depletors commonly cause parkinsonism, and vascular disease a poor mimic of PD, but both can also often aggravate or modify underlying PD.
There are many other causes of parkinsonism, most ofthem genetic. Probably the two most important are the recessive Wilson's disease (WD), because it is treatable and without treatment it is fatal, and the dominantly inherited dopa responsive dystonia (DRD, Segawa disease) because its signs and symptoms are almost completely controlled by L-dopa.

78
Anterior Clinoidal Meningiomas
Luis A. B. Borba MD (Brazil)

79
Treatment of Parkinson's Disease
Niall Quinn MD (UK)

Anticholinergcs were the first drugs used to treat PD, followed in the late 60's by L-dopa and amantadine.
The dopa decarboxylase inhibitors benserazide and carbidopa (in Madopar and Sinemet respectively) were introduced in the early 70's, and controlled release versions in the 80's.
The dopamine agonist era began in the md-70's with bromocriptine, later joined by the other ergoline oral agonists pergolide and cabergoline (all now rarely used because of lung, retroperitoneal and cardiac valve fibrosis), and then the non-ergolineropinirole and pramipexole and the transdermal rotigotine. Prolonged release oral formulations of ropinirole and pramipexole have also been introduced. Recently the frequency (13-14%), range and severity of impulse control disorders (including hypersexuality, compulsive gambling, shopping and eating, and morbid jealousy) in patients taking dopamine agonists has been increasingly recognised
Selegiline and rasagiline inhibit MAOB (which metabolises dopamine) and entacapone and tolcapone inhibit COMT (which metabolises L-dopa).
Whether rasagiline has disease modifying properties (as was originally claimed for selegiline) is the subject of controversy, and to date there is no conclusive evidence that any drug used to treat PD has neuroprotective effects.
More invasive drug treatment includes subcutaneousinjections or infusion ofapomorphine, and the intra-jejunal infusion of L-dopa-carbidopa gel (Duodopa).
On the surgical front, lesioning has given way to deep brain stimulation (DBS), and the preferred target has moved from thalamus through globuspallidus to subthalamic nucleus.
Fetalnigral grafts are still being investigated, and in the future there will be safety and efficacy trials using stem cells.

80
Tumors of Jugular Foramen
Luis A. B. Borba MD (Brazil)

81
Hyperkinetic Movement Disorders
Niall Quinn MD (UK)

In contrast to the akinetic-rigid syndromes, in which there is too little movement, hyperkinetic movement disorders cause unwanted, excessive, movement.
Step one in diagnosis is to identify which category of abnormal movement can be seen in the patient. Most abnormal movements can be described and identified using just 5 terms:- tremor, dystonia (athetosis is distal mobile dystonia), and three types of jerk – tics, myoclonus and chorea (ballism is severe proximal chorea).
Some patients display only one of the above, e.g. isolated tremor in essential tremor (ET). However, commonly a patient can present more than one movement disorder e.g. akinesia, rigidity, dystonia and chorea often coexist in Huntington's disease, and tremor, myoclonus and tics can sometimes also be seen. An important consideration whenever one sees a mixed movement disorder is whether

drugs, particularly dopamine receptor blocking drugs, might be the cause, or a complicating feature, since they can cause a combination of akinesia, rigidity, tremor, chorea and dystonia, and sometimes myoclonus or tics.
Step two, when the abnormality(ies) have been identified, is then to consider the overall syndrome, and thus which differential diagnostic box(es) to open, and step 3 is to hone down the differential.
At the heart of movement disorders is phenomenology. If picture can replace a thousand words, a video of a movement disorder patient can replace ten thousand words. Hence the publication of videos in the Movement Disorders Journal since its inception.
In this interactive session I shall show video examples of common types of hyperkinetic movement disorder in common and rare diseases with the emphasis more on the phenomenology (what you see) rather than the next step which is diagnosis.

Hall D Session 4
Pediatrics

82
Initial Experience of Atrial Septal Defect Closure with Occlutech Figulla Device at Queen Alia Heart Institute

Awni Madani MD, Majdi Jaafreh MD, AbdelFatah Haweleh MD, Issa Hijazi MD, Rania Haddadin MD, Raed Amlih RN, Hadeel Shawareb RN, Abdallah Khresat RN, Raed Shibli RN, Ziad Shatti RN*
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Objectives: To evaluate the effectiveness of the Occlutech Figulla occluder device in the treatment of ostium secundum atrial septal defect.
Methods: This is a retrospective cohort study conducted between June 2008-June 2011 involving 54 cases with ostium secundum atrial septal defect who underwent transcatheter closure using the Occlutech Figulla device. All procedures were done under general anesthesia with continuous tranesophageal echocardiographic monitoring. Clinical and echocardiographic assessment were done after 24 hours and then after 1, 3 and 6 months respectively. The results are presented as means, standard deviations and percentages.
Results: From the 54 cases 33 patients (61%) were females. Their mean age and weight were 16.47± 11.8 year, 38.4 ± 20.7Kg respectively. The mean atrial septal defect diameter by tranesophageal echocardiogram was 13.2 ± 4.2mm , and the mean atrial septal defect size of the implanted device was 15.97± 4.5mm, ranging from 10.5 to 27mm. Two cases were sent for surgery due to inadequate postero-inferior rim .The procedure success rate was 96.3%. In 5 cases (9.6%) there were trivial residual shunt after 24 hours of the procedure which were disappeared at follow up.
Conclusion: The Occlutech device is safe and effective for transcatheter closure of secundum atrial septal defect. We need a long term follow up studies to evaluate the safety of the device.

83
Total Cavo-Pulmonary Connection at Queen Alia Heart Institute: Thirteen Years Follow Up

Awni Madani MD, Yousef Zureqat MD, Abdelafattah Haweleh MD Isa Hijazi MD, Rania Haddadin MD, Majdi Jaafreh MD, Munther Obedat MD, Hani Tarawneh MD, Majeda Hinawee RN, Ohoud Alawneh RN*
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Objectives: To determine midterm results of univentricular repair using intra-atrial lateral tunnel at Queen Alia Heart Institute (QAHI).
Methods: Between January 1999 and January 2012, 367 patients (215 males, 152 females) underwent either a fenestrated or non-fenestrated lateral tunnel (Fontan procedure), for a wide range of complex congenital heart disease with a functional single ventricle at QAHI. Multiple factors were analyzed including: , mean right atrial pressure(RAP),pulmonary artery pressure(PAP), ventricular end diastolic pressure(VEDP), cardiopulmonary bypass(CPB) time and ischemic time , early and late mortality.
Results: Double inlet left ventricle was found in 168 patients, tricuspid atresia

in 148 patients, double outlet of the right ventricle with small left ventricle in 23 patients, unbalanced complete atrioventricular septal defect in 18 patients and pulmonary atresia with intact septum in 16 patients. . Their mean right atrial pressure 9± 4 mmHg, PAP was 14± 3 mmHg, PVR 1.8 ± 3mmHg , VEDP 13± 3.1 mmHg, aortic saturation 85± 2 %, CPB time 121± 9 minutes, ischemic time 47± 3 minutes. There were 25 (6.8%) early deaths (< 30 days postoperatively), and no late deaths were occured after 10 years of follow up.

Conclusion: Proper selection of patients for the lateral tunnel Fontan procedure results in excellent early , mid and late term survival and functional outcome with low incidence of arrhythmias, protein loosing enteropathy , cerebral insults and mortality.

84
Management of Patent Ductus Arteriosus at Queen Alia Heart institute: 3 Years Experience

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Objectives: Patent ductus arteriosus (PDA) is a common form of congenital heart disease and forms about 5-10% of congenital heart diseases. The aim of the study was to analyze different modalities of the management including surgical and interventional closure.

Methods: All cases of PDA over 3 years from 2009 to 2011 were studied. Diagnosis was made by 2D echocardiogram and cardiac catheterization. 204 patients were studied (128 female, 76 male), mean age 4.5 year (range7 months to 37 years).The patients were divided into two groups, surgical and non surgical PDA.

Results: 74(36%) patients under went surgical closure, 130(64%) were nonsurgical including, 100(49%) under went successful transcatheter closure using Amplatzer duct occluder device in 90 patients (90%) and 10patints (10% had coil closure). 30(15%) cases were left without any intervention.

Conclusion: Although surgery is still is safe and effective; however, certain patients may experience some morbidity with patent ductus arteriosus (PDA), transcatheter techniques have largely supplanted surgery for closure of PDA in children and adults.

85
Flexible Bronchoscopy Experience in Children with Upper Airway Obstruction

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Objectives: to describe the bronchoscopic findings and treatment decision in children with chronic or recurrent stridor.

Methods: a retrospective study was conducted on all children who underwent flexible bronchoscopy for chronic stridor from January 2009 to January 2010. Stridor was divided in three group; inspiratory, expiratory or Biphasic. Patients were between day 1 till 14 years of age. Specially formulated data sheet was used. Radiological investigation results were included also. Procedure was done under conscious sedation and topical anesthesia

Results: A total of 128 children with stridor (70 (55%) males and 58(45%) females) were included. 48 children had inspiratory stridor (40 had laryngomalacia and 4 had laryngeal papillomas ,2 with laryngeal cysts and 2 with mucocele at the base of the tongue). There were 66 patients with biphasic stridor (subglottic stenosis in18, 12 paradoxical vocal cord movement(PVM), 10 vascular ring in, 6 subglottic hemangioma, 8 vocal cord paralyses, foreign body in 4, laryngeal web in 4, absent vocal cord and tracheal bronchus, 2 in each). 14 children had expiratory stridor (pulmonary sling in 4 and tracheomalacia in 10). 50% of laryngomalacia patients had associated tracheomalacia. 70% of those with laryngomalacia and all with tracheomalacia had associated gastroeosogeal reflux. Two with PVM found to have Arnold-Chiari malformation that required shunting. All those with vascular ring underwent

surgery, and only two with subglottic stenosis underwent tracheotomy.
Conclusion: Flexible bronchoscope should be part of the initial investigations in children with upper airway obstruction. A schematic approach need to be established so that non necessary complementary investigations can be avoided.

86
Unusual Presentation of Varicella Case Report

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Chickenpox is generally a benign disease in developed countries. In Germany, up to 1% of general practitioner consultations for varicella and its complications result in hospital admission. In children, bacterial superinfections are one of the most common complications. Skin and soft-tissue infections are the most frequent manifestations of this in healthy children, but life-threatening septicaemia may sometimes supervene. We highlight this with a report of a child boy with pre varicella severe sepsis, which had some unusual features before skin eruption. The aim of our report that unusual presentation of chicken pox with picture of septic shock before skin eruption appear.

87
Early Aggressive Intravenous Fat Emulsion Decreases the Incidence of Retinopathy of Prematurity

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Objectives: To evaluate the effect of early aggressive introduction of intravenous fat emulsion on the occurrence of retinopathy of prematurity.
Methods: A retrospective study conducted at Prince Hashem Ben Al- Hussein Military Hospital. A 100 premature infants of ≤34 weeks gestational age, and /or of < 1500 grams, all who needed oxygen support for respiratory distress syndrome and who either not received or who received either early aggressive or late non-aggressive intravenous fat emulsion, and all who underwent eye examination for ROP.
Results: Of total 100 premature infants studied 17 (17%) found to have ROP. Of the 32 premature infants who received early aggressive IVFE, 4 (12.5%) diagnosed to have ROP. Of them 9.4% with stage (1), 3.1% with stage (3) and none had stage 2, 4 or 5. Of the 33 preterm infants who received late non-aggressive IVFE 5(15%) documented to have ROP. In this group 6% had stage (1), 2% stage (2), 3% stage(3) and no single preterm infant had stage 4 or 5. Of the 35 premature infants who did not receive IVFE at all, 8(22.8%) developed ROP of them 5.7% developed stage (1) ROP, 8.5% stage (2), 5.7% stage (3), 2.8% stage (4) and none had stage 5.
Conclusion: Early aggressive introduction of intravenous fat emulsion associated with better retinal development in preterm infants and thus decreases the prevalence of retinopathy of prematurity.

88
Pattern and Outcome of Admissions to the Neonatal Unit at Prince Hashem Bin Al-Hussein Military Hospital

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Objectives: To analyze and determine the number, disease pattern and outcome of neonates admitted to the unit from august 2009 to july 2010.

Methods: Data of all the admissions was recorded and analyzed according to gestational age, weight, sex, cause of admission, hospital course and final outcome.
Results: 332 neonates were admitted out of the 5071 deliveries. (43%) of the admissions resulted from C/S deliveries (57%)were born vaginally. (57%) were males. Premature babies constituted 44% of the admissions and LBW (<2.5 kg) babies were 45% . Diagnosis at admission: RDS(24%).TTN (22%). Jaundice (16%) birth asphyxia (8%). R/O sepsis(7%)

(4.2%) surgical cases, PROM (3.9%), (4.8%) gross congenital anomalies, MAS (1.8%),CHD(1.5%). 51 babies died during the aforementioned period. The most common cause of mortality was the extreme premature category,(31%). RDS and complications (29%) multiple congenital anomalies (27%), .Asphyxia (11.8%).Proved sepsis with positive cultures (9.8%).

Conclusion: The unit is a tertiary facillity with an IVF department so prematurity/ RDS is the most common cause of admission . Mortality is high in the ELBW group necessating an aim for better future survival outcome. Fetal screening is still inadequate to detect the major congenital anomalies as most cases were unbooked. Jaundice needs to be approached seriously antenatally as many cases were from sensitized mothers.

89
Antibiotic Resistance Pattern of Children with Urinary Tract Infection (UTI) at Prince Hashem Bin Al-Hussein Military Hospital

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Objectives: Urinary tract infection is certainly one of the most common childhood infections. Growing antibiotic resistance demands the constant reassessment of antimicrobial efficacy, particularly in countries with wide antibiotic abuse. To study the pathogens causing UTI in children treated at Prince Hashem hospital and there antibiotic resistance patterns.

Methods: A retrospective study carried out at Prince Hashem hospital and involved all positive urine cultures done to children age from birth to 14 years during the period from January1st, 2011 by December 31, 2011. The isolated microorganisms and there antibiotics susceptibility were studied. Data was compared with a similar previous study done at the same hospital in 2004 in order to study the changing pattern of antimicrobial resistance.

Results: A total of 886 positive urine cultures were identified and enrolled in the study. E coli continued to be the most common isolated microorganism and found in 65% of cases, followed by Klebsiella (13%) and Pseudomonas spp. (10%). Significant increase of resistance rates among bacterial pathogens to most antibiotics.

Conclusion: Pediatric urinary tract isolates are becoming increasingly resistant to most antibiotics including third generation cephalosporins. Nitrofurantoin and Nalidixic acid continued to be less resistant antimicrobials and should be considered for first line oral empiric treatment in uncomplicated UTI. While Imipenin and Azactam for empiric intravenous therapy.

90
Urinary Tract Infection among Neonatal Intensive Care Unit (NICU) graduates, is it a Hospital Acquired Infection?

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Objectives: To describe pattern of bacteria that causes urinary tract infection (UTI) in infants after discharge from neonatal intensive care units (NICU) including type of bacteria causing it and compare that with UTI that Occur during hospitalization in NICU

Methods: Study included 74 patients with first episodes of UTI in the first 3 months of life. They were divided into 2 groups, 31 NICU patients (group 1), 43 patients with UTI after discharge from NICU (group2(NICU graduates)). Types of bacteria, its susceptibility to common antibiotics, renal abnormalities and circumcision status were compared between both groups.

Results: Incidence of UTI among NICU graduate who were preterm and who were term wer was 8.2% and 2.1% respectively. More than 80% of patients in the 2 groups were male. About three fourth of patients in both groups were premature. The most common causative bacteria in both groups were Klebsiella pneumoniae and Escherichia coli. Bacteria that caused UTI

in NICU graduates were highly resistant to common antibiotics and were similar (in types and the resistance) to bacteria that caused UTI in patients during stay in NICU. Almost all patients who have known circumcision status were uncircumcised

Conclusion: UTI in NICU graduates happen frequently in premature, uncircumcised young male infants. Their UTI were caused by bacteria that is similar in type and resistant pattern to those cause UTI NICU patients.

Hall E Session 1
Internal Medicine & Rheumatology

91
RA and Atherosclerosis

Ali Jawad MD (UK)

92
Hypereosinophilic Syndrome

Olivier Bletry MD (France)

93
Relapsing Polychondritis

Ali Jawad MD (UK)

Relapsing polychondritis(RP)is an immune-mediated condition associated with inflammation in cartilaginous structures and other tissues throughout the body, particularly the ears, nose, eyes, joints, and respiratory tract. Tissues that have a biochemical makeup similar to that of cartilage such as the eyes, heart, and blood vessels, can also be affected. Approximately one-third of RP cases occur in association with another disease, usually some form of systemic vasculitis, a connective tissue disorder, or a myelodysplastic syndrome.

Clinical features: Typically, RP causes sudden pain in the inflamed tissue at the onset of the disease. Common symptoms are pain, redness, swelling, and tenderness in one or both ears, the nose, throat, joints, and/or eyes. Fever, fatigue, and weight loss often develop. Inflammation of the ears and nose can cause deformity (saddle nose deformity and floppy ears) from weakened cartilage.Impaired hearing, balance, and nausea can be caused by inner ear inflammation. Inflammation of the trachea can lead to throat pain, hoarseness, and breathing difficulty. This is a potentially dangerous area of inflammation in patients with RP, which can require assisted breathing methods when severe. Joint inflammation can cause pain, swelling, and stiffness of the joints, including of the hands, knees, ankles, wrists, and feet.

Joint involvement: Involvement of the parasternal joints (the sternoclavicular, costochondral, and manubriosternal articulations) is typical. Peripheral joint involvement occurs in 70% of patients. In peripheral joints, the processes may differ from the destructive cartilaginous inflammation found in the ears, nose, eyes, and large airways. Peripheral joint disease in RP is usually nonerosive unless associated with an underlying arthritis such as RA.Both large and small peripheral joints may be affected, with distributions that range from monoarticular disease to oligoarticular involvement to polyarthritis. Asymmetric arthritis is not unusual. Arthralgia can occur in the absence of objective evidence of inflammation. Synovial fluid aspirates are usually noninflammatory. The arthritis may resolve spontaneously over days to weeks, and is typically responsive to anti-inflammatory treatment. The asymptomatic interval between flares is variable in length. On occasion, vertebral involvement or tenosynovitis may be observed.

Renal disease: The frequency of renal disease in RP remains unclear. Renal disease, as determined by biopsy or the presence of haematuria and/or proteinuria, was present in 29 of 129 patients (23%) seen at the Mayo Clinic between 1943 and 1984. This probably represents an overestimate due to referral bias at a large tertiary care centre. The observed survival in patients with renal disease was significantly lower than in patients without renal involvement.

The most frequent renal lesions observed by biopsy are mesangial expansion with cellular proliferation and segmental necrotizing glomerulonephritis. Tubulointerstitial disease and IgA nephropathy has also been reported.

McAdam's criteria for diagnosis: The original (required the presence of three or more of the following:

- Bilateral auricular chondritis
- Nonerosive, seronegative inflammatory polyarthritis
- Nasal chondritis
- Ocular inflammation — conjunctivitis, keratitis, scleritis/episcleritis, uveitis
- Respiratory tract chondritis — laryngeal

and/or tracheal cartilages
- Cochlear and/or vestibular dysfunction — neurosensory hearing loss, tinnitus and/or vertigo

A histologically compatible biopsy (ear, nose, respiratory tract) was considered necessary unless the diagnosis was clinically obvious.

Damiani and Levine Criteria: To establish the diagnosis, all patients were required to have one of the following:
- At least three of McAdam's diagnostic criteria
- One or more of the above clinical findings with positive histologic confirmation
- Chondritis at two or more separate anatomic locations with response to steroids and/or dapsone

Treatment: Treatment usually involves corticosteroids and immunosuppressants.

The course of symptoms for patients is often unpredictable.

94
Systemic Diseases and Thrombosis

Olivier Bletry MD (France)

Hall E Session 2
Internal Medicine & Rheumatology

95
Cystic Fibrosis Arthritis

Ali Jawad MD (UK)

Background: Over the past forty years, the use of therapies directed entirely at symptoms have improved the quality of life in patients with cystic fibrosis (CF) and have increased the median survival age from 11 years to 37 years. Although bone and joint manifestations are common in children with CF, they have received little attention in adults. CF-related arthropathy (CFA) is a relatively infrequent complication previously reported to be present in 2-9 % of the CF population. It usually affects the large joints with recurrent episodes of swelling and stiffness (episodic arthritis). It may become more persistent with a polyarticular distribution. Less commonly and affecting older patients is hypertrophic osteoarthropathy (HPOA), a syndrome characterized by abnormal proliferation of the skin and osseous tissue at the distal parts of the extremities, occurring in association with radiographically confirmed periosteal new bone formation. Age of onset is 20. Clubbing and HPOA appear to be different manifestations of the same disease process.

Although clubbed fingers and toes are common in patients with long-standing CF, HPOA is uncommon (2-7 % of patients).

Objectives: In this study we aim to assess the frequency and describe the clinical presentation of musculoskeletal complications in adults with CF.

Methods: At the time of this study, 143 adult CF patients (range 16-63, 80 males, 63 females, average age 28.5) were under the care of the London Chest Hospital CF Unit. Their medical records, laboratory and radiological results were analyzed retrospectively.

Results: 19 of 143 CF patients (13.3%) suffered from musculoskeletal problems, of which 10 had CFA (7%). Other diseases included spondyloarthritis, chondromalacia patellae, vitamin D deficiency, back pain and rotator cuff tendinopathy. There were no cases of hypertrophic osteoarthropathy or transient synovitis. Among the CFA patients, 6 were female and 4 were male. The average age of onset of a female patient was 25.5 years (23 to 30) and of a male patient was 38.25 (36 to 43). All patients suffered from polyarthralgia. 5 patients had moderate and 5 had severe underlying CF disease. On screening only one patient tested positive for ANA, all were negative for both RF and anti-CCP antibody. 5 patients had US scan of their affected joints; one had evidence of active synovitis and erosions. There was no radiological evidence of erosive joint disease in any of the patients. All patients received nonsteroidal-antiinflammatory drugs (NSAIDs) as their primary treatment. Due to inadequate clinical response 5 received disease modifying anti-rheumatic drugs (DMARDs) as well (sulphasalazine, hydroxychloroquine or methotrexate).

Conclusions: Similar to previous reports, the incidence of CFA in our cohort was 7%. Interestingly, the age of onset was lower for female patients compared to males. Though there was hardly any synovitis clinically, there was evidence of synovial thickening and erosions on US and Doppler. Although NSAIDs usually control

symptoms, half of our patients needed DMARDs as well. Unlike other series, we had no cases of large joint episodic arthritis or cases of HPOA. Instead, our patient showed an RA like polyarthritis (small and large joints) with an age of onset of 25 in females and 38 in men.
In addition to NSAIDs, DMARDs are often needed.
There should be a low threshold for referral to a rheumatologist because the arthritis and limitation of movement may become disabling and interfere with mobility, exercise and chest clearance, all essential components of CF daily treatment routine.

96
Antiphospholipid Syndrome and Pregnancy

Olivier Bletry MD (France)

97
Lupus Nephritis at King Hussein Medical Center

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Objectives: Renal involvement is a serious feature of systemic Lupus Erythmatosus. It has been shown that the decision to institute therapy is highly informed by the results of renal biopsy We present the first review of lupus nephritis in KHMC, and we compare our findings with other studies.
Methods: We retrospectively reviewed medical records and renal slides of 74 patients over a 14 year period (1996≤2009). the renal biopsy specimens were studied by light and immunofluorescence microscopy.
Results: 74 patients were reviewed, 69 (93.24%) were females and 5 (6.75%) were males. The female to male ratio was (13.8:1).The median age was 26 year. The indications for renal biopsy were the presence of proteinuria, defined as a 24 hr urinary protein excretion on presentation 0.5g and/or the presence of active casts in the urinary sediment. Diffuse proliferative glomerulonephritis (class IV) was the most frequent histopathologic finding in our patients seen in 30 patients (40.1%). The frequencies of other histopathologic findings were as follows: Class III (n=10, 13.5%), Class V (n =7, 9.5%), Class I (n =6, 8.1%), class II (n=1, 1.3%). All the patients were treated with different combination of treatment. All patients were followed up, 2 died . 58 patients had controlled disease, 11 still having active disease, and 4 patients on chronic hemodiaysis, one of them had kidney transplant.
Conclusion: Diffuse proliferative GN class IV was the most frequent type of lupus nephritis in the world as in this study.

Hall E Session 3
Pulmonology & Thoracic Surgery

98
Flail Chest Wall Stabilization

Michael Mueller MD (Austria)

The morbidity of serial rib fractures is often underestimated. A retrospective analysis of 181 331 patients after car accidents using the US National Trauma Databank revealed that 55% of patients over 60 years dying after chest trauma had no more than rib fractures. Patients over the age of 45 years with more than four rib fractures are more severely injured and at increased risk of adverse outcomes. Hence, efforts to decrease rib fracture morbidity should focus not only on elderly patients but those as young as 45 years.

Serial rib fractures have effects on the chest wall with loss of rigidity, paradoxical motion and the consequence of ineffective cough, as well as effects on the lungs including hypoventilation, contusion and resulting hypoxemia.

When deciding on the optimal treatment of serial rib fractures with flail segments the conservative approach with internal pneumatic stabilization had been evaluated as an alternative to surgical approaches. Relevant recent literature clearly demonstrates superiority of surgical stabilization over pneumatic stabilization regarding incidence of pneumonia, length of ICU stay, length of mechanical ventilation and requirement of tracheostomy.

The indication for surgical stabilization can be considered along with a routine emergency repair when closing a thoracotomy, or electively at the presence of poor pain control, chest wall instability and the risk for respiratory failure or to

correct for major chest wall deformities. Commercially available rib stabilization sets have minimized the additional trauma related to this kind of surgery and allow for a quick and reliable r5econstruction of multiple rib fractures at one time and narcosis.

Multidisciplinary management of chest trauma is mandatory in the treatment of patients with serial rib fractures and related problems. Surgical stabilisation of flail chest decreases mortality and morbidity, improves functional and cosmetic outcome, and is cost effective.

99
Interventional Diagnosis and Staging of Lung Cancer

Grigoris Stratakos MD (Greece)

A firm tissue diagnosis of lung cancer is crucial not only to differentiate nonsmall cell lung cancer (NSCLC) from small cell lung cancer but also to obtain enough tissue for mutation assessment in order to apply specific treatment. In patients with intra-thoracic disease, bronchoscopy remains a standard procedure that can provide important diagnostic as well as staging information. Bronchoscopy has a higher sensitivity for the diagnosis of central tumours compared to peripheral tumours and is the primary investigation of choice for centrally located tumors. A pooled sensitivity of 88% has been reported when a combination of biopsy, brush, wash and bronchoalveolar lavage (BAL) is performed. The use of electrocautery forceps and cryoprobe may further increase the diagnostic yield.

For peripheral lung lesions, transbronchial biopsies provide the highest sensitivity (57%) Bronchial brushings and BAL have a pooled sensitivity of 54 and 43%, respectively. Some centres also employ fluoroscopy to direct bronchoscopic procedures, which may improve the diagnostic yield of peripheral lesions. Transbronchial biopsy of lung parenchyma (with or without screening) is useful in the diagnosis of lymphangitis carcinomatosis.

Conventional (CT guided) transbronchial needle aspiration (TBNA) with a 19 or 22 gauge needle is a safe but underutilised procedure for mediastinal lymph node staging. This is most commonly performed in the subcarinal lymph node station, lower paratracheal and hilar lymph nodes.

Rapid on-site evaluation of samples allows an immediate diagnosis of malignancy or can confirm the adequacy of a specimen by identifying lymphocytes.

A positive result from TBNA may prevent further invasive tests, particularly when combined with PET.

Further invasive sampling always remains necessary in the event of a negative or nondiagnostic sample. Surgical biopsy and mediastinoscopy are still considered to be gold standard investigations. However, rapid advances in technology have allowed the bronchoscopist's role to be expanded considerably.

Endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) is an important new and minimally invasive technique for the diagnosis and staging of NSCLC. It allows the pulmonologist to sample the mediastinum in a minimally invasive manner under direct vision and with high sensitivity. In the largest cohort of 502 patients, the sensitivity of EBUS-TBNA for diagnosing mediastinal disease was 94% in the context of a disease prevalence of 98%. An average pooled sensitivity of 90%, has been reported. Importantly, the false negative rate of EBUS-TBNA is currently 20% and therefore negative or benign aspirates should be followed by further invasive mediastinal staging. No complications of the technique have been reported, and the leaning curve may be a short as 10 cases.

Autofluorescence bronchoscopy aids in the diagnosis of pre-invasive lesions and early lung cancers, while endobronchial and endoscopic ultrasound have become established for the mediastinal staging of NSCLC. In the current epidemic of lung cancer, these techniques are at the forefront of establishing a diagnosis and disease stage and are central to the multidisciplinary diagnostic approach and staging of lung cancer.

100
Sublobar Resection in the Treatment of Lung Cancer

Michael Mueller MD (Austria)

Lung sparing resections of lung cancer have been practiced since decades. The background is the high morbidity and mortality of pneumonectomy, especially for right-sided lung cancer. To avoid pneumonectomy, bronchoplastic and angioplastic procedures are increasingly applied in order to preserve healthy lung tissue along clear oncological rules. Long term survival and local recurrence rates are identical with the results after lobectomy.

The concept of parenchyma-sparing surgical treatment of lung cancer has further led to the idea of sublobar resections, reserved for patients with severely hampered respiratory reserve. It became evident, that extra-anatomical resections like simple wedge resections of peripheral small cancers is burdened with unacceptable local recurrence rates, compared to anatomical segmental resections along segmental plains and accompanied by standardized lymph node dissection. In more recent years sublobar resections for stages IA and IB have been offered also to patients being fit for lobectomy in order to improve QOL.

According to a meta-analysis published 2009 by Rami-Porta R and including 20 studies of patients with tumours in stage IA and IB operated either by lobectomy or sublobar resection (wedge resection and anatomical segmental resection) revealed the following results and recommendations:

The indication of sublobar resection must be considered with caution. Although survival may be similar to that of lobectomy, the associated higher local recurrence rate may lead to other treatments that may contribute to the loss of the patient's quality of life. Sublobar resection for T1N0 results in more local recurrence, but similar survival as compared to lobectomy. Wedge resection for stages IA and IB results in worse survival compared to anatomical segmental resection. Segmentectomy offers wider tumor-free margins compared to wedge resections, which explains the significantly higher local recurrence rates after wedge resection.

However, the debate goes on. A recent multicentric study published 2011 by Whitson BA et al included 14,473 patients with stage I ADC or SCC. Lobectomy conferred superior unadjusted overall ($p < 0.0001$) and cancer-specific ($p = 0.0053$) 5-year survival compared with segmentectomy. Patients who underwent lobectomy had superior overall and cancer-specific survival rates, regardless of tumor size.

At present segmentectomy should be offered only for T1a NSCLC, whereas VATS lobectomy can be recommended as surgical approach for T1b and T2a tumours. In very recent publications also VATS segmentectomy seem to offer promising results. Any other kind of sublobar resection, like wedge resection or laser resection should be reserved only for patients with limited CP reserve (higher local recurrence rate). Prospective randomized multicentric studies are currently under way to increase our knowledge in this still open discussion.

101
Endoscopic Management of Post Intubation Tracheal Stenosis: An Update

Grigoris Stratakos MD (Greece)

Postintubation tracheal stenosis is an iatrogenic complication that occurs in critically ill patients receiving mechanical ventilation. It is by far the commonest benign cause of tracheal
stenosis with an estimated incidence of 1% among intubated patients.

Following simple and concrete preventive measures should avert this severe and potentially fatal complication. High clinical suspicion is vital to promptly diagnosing this condition once
it appears.

Treatment of post intubation tracheal stenosis may be difficult due to usually poor patient health status at the time of diagnosis. Circumferential sleeve resection of trachea with end to-
end anastomosis remains the treatment of choice, although it is only applied in strictly selected patients by highly experienced surgeons and is related to serious complications and significant relapse rates. Bronchoscopic, non-surgical techniques applied by interventional pulmonologists,

including bronchoscopic or balloon dilatation, laser resection and stenting have been proposed as alternatives to open surgery and feature several advantages. Indeed, short, web like stenoses may be definitively cured by laser resection and gentle dilatation, while stents are helpful for splinting lengthy and complex stenoses. In inoperable cases, silicone stents represent the only therapeutic alternative; they are also valuable as initial conservative treatment in view of prospective surgical correction, allowing time for preparing the patient.
A multidisciplinary algorithm approach engaging pneumonologists, as well as thoracic and ORL surgeons is proposed and seems crucial for the optimum management of these difficult to treat patients.

102
Lower Tracheal and Carinal Resection

Michael Mueller MD (Austria)

Surgical resection of the trachea and carina requires a highly specialized team of thoracic surgeons, anesthesiologists, and operative support staff because of the complex nature of these procedures. The resection of the central airways has been studied, practiced and promoted by few thoracic surgeons, of which Hermes Grillo certainly was among the best known. Grillo HC and Mathisen DJ as early as 1990 published their results with almost 200 patients treated over a period of 26 years. 82 patients underwent tracheal resections and 50 patients received carinal resections. Thanks to their experience and recommendations this kind of surgery today is quite standardised and well established.

Aside from the pure surgical challenges of deciding for the best surgical approach, suture technique and release manouvers, surgery of the distal trachea and carina requires a perfect cooperation of surgeons and anaesthesiologists. The principal anesthetic consideration is ventilation and oxygenation in the face of an open airway. Ventilation can be managed in different ways: manual oxygen jet ventilation, high frequency jet ventilation, distal tracheal intubation („cross field"), spontaneous ventilation, cardiopulmonary bypass, or ECMO.

Patients should be carefully selected and enrolled in a multimodality treatment program offering induction chemotherapy not only in case of anticipated mediastinal lymph node involvement. Recent work supports the view, that aggressive treatment of node-negative T3 and T4 NSCLC with induction chemoradiotherapy may significantly prolong survival.

Operative mortality of carinal resections can be kept below 8% in experienced hands and complete resections can be achieved in a majority of patients. The overall 5-year and 10-year survival rates are around 25% and 10% according to recent publications.
The nodal status at surgery is of paramount importance for the long-term prognosis of these patients. Patients with N0 or N1 disease have a significantly superior 5-year survival of 38% as compared with 5% for those with N2 disease.

103
Medical Thoracoscopy: A window to the Pleura

Grigoris Stratakos MD (Greece)

Thoracoscopy is a procedure in which the pleura is directly visually examined. After creating a pneumothorax an endoscope is inserted through an incision in an intercostal's space. Both parietal and visceral pleura can be inspected and therapeutic interventions performed. The procedure can be done both under local and general anesthesia, is well tolerated and bears little side effects.
Swedish internist H.C. Jacobeus first described the technique in 1910 using a primitive cysteoscope. Since then thousands of thoracoscopies were carried out for the lysis of pleural adhesions (symphysiolysis) and effective therapeutic pneumothorax for Tuberculosis management, between 1910 and 1955 (when the antituberculous drugs were discovered).
A growing interest for medical thoracoscopy was noted around 1990. The interest was raised by the development of video-endoscopic surgical techniques, which led to the development of the

surgical thoracoscopy or video-assisted thoracic surgery (VATS), allowing for minimally invasive surgical procedures of the thorax. By contrast to the VATS procedure, medical thoracoscopy is performed by pulmonologists, in the usual endoscopy suite, under conscious sedation and spontaneous ventilation, and is usually limited to the exploration and biopsy of parietal pleura. Its main indications include the diagnostic approach of chronic exudative pleural effusion (Up to 20% of exudative pleural effusions remain undiagnosed after fluid analysis, cytology, culture combined with closed needle biopsy), pleural staging of lung cancer, pleural thickening or pleural mass but it can also be performed to treat complicated parapneumonic effusion and empyema as well as primary sponatneous pneumothorax and even sympathetic autonomous disorders (e.g. essential hyperhidrosia).

At the end of every procedure chest tube drainage is required to remove the residual air from the thoracic cavity and to ensure that there is no airleak or bleeding. Rapid expansion of the lung is usually confirmed by a chest roentgenogram, allowing the tube to be removed within 2–4 h if there is no important residual pleural effusion.

It is an absolute requirement that the pleural space be accessible for a thoracoscope. The minimal space required for insertion of a scope is about 1 cm, and the smallest cavity needed for creation of an artificial pneumothorax is at least 6–10 cm by 10 cm. Thick adhesions are considered to be a contraindication for thoracoscopy. Furthermore, adhesions will limit the possibility to take adequate biopsies, accounting for false negative results.

Other procedure-related absolute contraindications involve honeycombing of the lung, since this is associated with vulnerable visceral pleura and a high risk of bronchopleural fistula. Suspected arteriovenous aneurysms, hydatic cysts, pulmonary hypertension and highly vascularized pulmonary lesions are also contraindications for medical thoracoscopy because of the high risk of potentially lethal complications. Refractory cough is associated with a high risk of subcutaneous emphysema, and the procedure might therefore be postponed in a severely coughing patient.

Medical Thoracoscopy is overall an extremely simple, very efficient and relatively safe procedure having the major advantage of not requiring general anesthesia to be performed. It presents with a low complication rate even in patients with major comorbidity. The diagnostic efficacy of medical thoracoscopy for the evaluation of exudative pleural effusion is high, while it has been officially recommended for several therapeutic indications.

Medical thoracoscopy has already been a standard part of the interventional pulmonology curriculum worldwide and its clinical importance will only grow further s in the twenty-first century.

Hall E Session 4

104
Lund – Mackay Staging, Correlation between Computed Tomography Scan and Intraoperative Finding

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Objectives: CT scan of paranasal sinuses is a mandatory investigation before undergoing sinonasal surgery. There are many staging systems for chronic rhinosinusitis; in this study our aim is to compare Lund –Mackay staging system with our intraoperative findings, taking in consideration the timing of doing the scan.
Methods: A total of 73 patients aged 16 to 64 years were included in this study, all were scheduled to undergo sinonasal surgery for medically refractory chronic rhinosinusitis. Patients were divided into three groups according to time lag between date of CT scan and date of surgery; less than 2 weeks, 2weeks- 8 weeks, and more than 8 weeks. All CT scans were studied and staged according to the Lund – Mackay staging system a long with the standard demographic data; Left and right sides are staged separately and the scores are summed so that the total Lund- Mackay score may range from 0 to 24. All patients underwent microscopic endoscopic sinus surgery; operations were performed by surgeons who are familiar with the system.

Results: Demographic data were comparable between study groups, patients who have there scans done less than 2 weeks of surgery have the most comparable findings between CT staging and intraoperative staging. Treatments used during the lag time also have influenced our findings.
Conclusion: CT scan staging prior to sinonasal surgery has an important role in planning surgery; Lund – Mackay staging system is of great help to surgeon in sinonasal surgery whether in planning or expected intraoperative findings.

105
Benign Lesions of the Vocal Cords: Prospective Study of 60 Cases

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Objectives: To carry out a prospective analysis of benign lesions of the vocal cords treated in our institute over a period of 4 years.
Methods: 60 patients presenting with a chief complaint of hoarseness were taken up. Those found to have apparently a benign laryngeal lesion were selected for the study. All non operative cases and any patient showing evidence of malignancy was not included. Each patient was subjected to indirect laryngescopy and or flexible nasopharyngolaryngoscope examination. Patients then were subjected to direct microlaryngescopy with aid of operating microscope in order to obtain a definite histopathological diagnosis. Data regarding sex and age of patients, anatomical site, and occupation was documented. Post-operative follow-up and histopathological type of the lesions was analyzed.
Results: A male preponderance with M: F ratio of 2.5:1 was observed. Majority 50% was in the age group of 26-35 years. Vocal polyps were the commonest type of lesion. Hoarseness was the main presentation in 54 (90%) and stridor in 6 cases (10%). Majority of the patients 73.3% presented within 1 yr of the symptoms of hoarseness and 15% between 1-2 yrs of onset of hoarseness. The highest incidence was seen in housewives 25% followed by school teachers 21.7% and students 18.3 %. The free margin of vocal cord was the commonest site of origin of these lesions in 70 %. Majority of patients 90% have totally symptom free after surgery and 10% have partial recovery of their symptoms.
Conclusion: Hoarseness is a common manifestation of laryngeal disease. Vocal cord polyp and nodule are the most common encountered benign vocal cord lesions. Speech therapy following Micro laryngeal surgery forms an essential part of treatment for benign vocal cord lesions as recurrence can be avoided due to care of the primary lesion by avoidance of forced or stressful phonation

106
Recurrent Respiratory Papillomatosis: our Experience at Queen Rania Al-Abdullah Hospital for Children at the Royal Medical Services

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Objectives: To evaluate our clinical experience in dealing with recurrent respiratory papillomatosis (RRP) at Queen Rania Al-Abdullah Hospital for children.
Methods: A total number of 9 patients (8 males, one female) were diagnosed by means of history; physical examination and flexible nasopharyngolaryngoscope .Patients age at time of presentation were 2-10 years. The presenting symptom was just hoarseness of voice in 5 patients (group 1). Hoarseness and dyspnoea on exertion in 3 patients (group 2) and respiratory distress in only one patient (group 3). All 9 patients had been treated by microdebrider excision using apnoic technique. In 3 of patients (group 2) we injected MMR vaccine intralesional and we injected sometimes MMR vaccine and Cidofovir intralesional in only the most severe case (group 3).
Results: In group 1 and 2 the post operative symptom free period was 6-8 months. In

group 3 the symptom free period was 4-5 weeks when MMR was injected and 10-12 weeks when Cidofovir was injected.
Conclusion: Recurrent Respiratory Papillomatosis (RRP) is a benign neoplasm caused by HPV, it affects mainly children, it has high recurrence rate with remissions. Best results are achieved using microdebrider and Cidofovir intralesional injection.

107
Imaging of Antrochoanal Polyposis

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Objectives: The aim of this study was to evaluate the common radiological features at initial presentation and post operative follow up imaging of patients proved to have antrochoanal polyposis, and who were treated surgically, and to evaluate post operative clinical improvement of this sample.
Methods: A total number of 54 patients aged between 12 & 46 years with mean age of 21.3 years, who proved to have Antrochoanal Polyposis investigated by CT-Scan during 3 years period (between may 2009 & Feb.2012) were retrospectively evaluated and follow up imaging CT-Scan was performed for this group of patients.
The main presenting clinical symptom of the selected patients was nasal obstruction. We selected a coronal sinus CT-Scan as referral imaging modality for this study and according to which we made our calculations and conclusions.
Results: Unilateral polyposis was found in 38 patients (70.4%) and bilateral in 16 patients (29.6%). All patients were operated by Functional Endoscopic Sinus Surgery (FESS).The patients were followed up by CT-Scan axial and coronal views at 4-6 weeks post operatively and only in 7 patients we recorded a post operative inflammatory finding of which in 2 patients the diagnosis was recurrent antrochoanal polyp.
Conclusion: We conclude that CT-Scan was very accurate in diagnosing antrochoanal polyp pre and post operative assessment and the recurrence of this disease was very minimal according to follow up clinical and imaging results. The Functional Endoscopic Sinus Surgery (FESS) was very effective in preservation of normal antral mucosa with minimal complications in post operative follow up screening.

108
Clinical Profile of Benign Laryngeal Lesions

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Objectives: A retrospective analysis of all cases of benign laryngeal lesions diagnosed at Prince Zaid Military Hospital (Tafileh) for the period of Jun 2010- Jun 2012, the age distributions, sex, clinical presentation, smoking habit and histo-pathological types were analysed .
Methods: 22 cases of benign laryngeal lesions histopathologically confirmed were included in this study. The patients' age ranged from 17-74 years.
Results: Male predominance were noted with male: female ratio of 2,4:1 ,according to age distribution most patients were in the 35-45 age group ,65% were non smokers, the commonest histo-pathological type is benign vocal cord polyps and hoarseness was the commonest presenting symptom.
Conclusion: Benign laryngeal lesions are quite common in men, but histo-pathological confirmation is mandatory for all age groups.

109
The Role of Nasal Endoscopy in Children Undergoing Adenoidectomy

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Objectives: To introduce and try to establish a better way of performing adenoidectomy using nasal endoscopy.
Methods: A total of 40 children aged 2–13 years, who are scheduled for adenoidectomy, alone or in combination with tonsillectomy or myringotomy

and grommet insertion were studied prospectively. All of the operations were performed by the same surgeon. All patients underwent general anesthesia through a cuffed transoral endotracheal tube. The child was rendered supine with a sandbag under the shoulders and the neck. The mouth was held open with a Boyle-Davis mouth gag. The size of adenoids and the posterior and lateral nasopharyngeal walls were digitally palpated. The procedure began with a conventional curettage adenoidectomy to remove the main mass of adenoid tissue. Nasal endoscopy using a 4-mm 0° rigid endoscope was used to remove any residual adenoid tissue especially at the posterior choana using pediatric up-biting forceps.

Results: A total of 40 patients, 23 were male and 17 were female with mean age of 4 ± 1.3 years. All patients returned for follow-up after 2 months and completed the study. The surgical duration of this procedure ranged from 6 to 10 minutes. Post-operatively, there were no complications such as nasopharyngeal bleeding and all patients were discharged well a day later. Follow up after 2 months post-operation, all patients who underwent this procedure were asymptomatic and nasal endoscopy revealed scarred mucosa of nasopharynx with no remnant adenoid tissue.

Conclusion: Endoscopic assisted adenoidectomy is an adjunct to performing a more complete adenoidectomy; good visualization via endoscope thereby prevents complications such as residual adenoid and thus reducing the chances of developing recurrent adenoid obstructive symptoms.

Hall F Session 1
Radiology

110
Imaging Hemorrhage, Aneurysms, and Vascular Malformations
Meng Law MD (USA)

111
Imaging of Soft Tissue Tumors
Khalid Al Ismail MD (Saudi Arabia)

112
Hepatobiliary Imaging
Conall Garvey MD (UK)

113
Cystic Disease of the Pancreas
Conall Garvey MD (UK)

Hall F Session 2
Radiology

114
Imaging the Paranasal Sinuses
Meng Law MD (USA)

115
The Role of CT in the Imaging of the Acute Abdomen
Conall Garvey MD (UK)

116
MRI of Disc Diseases
Khalid Al Ismail MD (Saudi Arabia)

117
MR Imaging of the Rotator Cuffs
Khalid Al Ismail MD (Saudi Arabia)

Hall F Session 3
Radiology

118
Imaging in Alzheimers Disease
Meng Law MD (USA)

119
Imaging White Matter Disorders
Meng Law MD (USA)

120
Flow Diverters in the Treatment of Intracerebral Aneurysms
Hazem Habboub MD, Amer Shorbaji MD, Moneer Dhiat MD, Majed Habahbeh MD, Maher Khawaldeh MD, Zuhair Abo Salma MD, Mr. Ali Obaidat Mr. Alaa Hammad*
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Objectives: To review the value and effectiveness of flow diverters in the treatment of subarachnoid hemorrhage due to ruptured aneurysms and non ruptured aneurysms as a new modality of treatment

Methods: 68 patients were treated with a flow remodeling device(Flow diverters) between January 2009 to May 2012 using two type of devices; pipeline and Silk. 28 patients were done for treatment of aneurysms above the internal carotid artery bifurcation, including middle cerebral and anterior communicating artery aneurysms. In 14 patients treatment was done in the acute rupture phase. in 5 patients treatment was done for failed previous coiling
Results: remodeling effect was achieved in 66 patients immediately(97%). total occlusion of the aneurysm was achieved in 45 patients at 3 months follow up and in 60 patients at 6 months follow up (88%). immediate complication occurred in 6 patients in the form of thromboembolic/ stroke (9%) . early rebleeding occurred in 4 patients (6%). mortality occurred in 8 patients (11%).
Conclusion: Flow diversion is a new concept in the treatment of intracerebral aneurysms. recurrence of the treated aneurysms and rebleeding has been a concern with traditional treament of aneurysms with coils or balloon and stent assisted coiling. flow diversion provides a new option for treatment with more definitive occlusion rate.

121
Palque Debulking (Atherectomy) in the Management of Critical Limb Ischemia

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Objectives: Critical limb ischemia is a difficult problem. recanalization and improvement of the ankle-Brachial index i associated with better survival and amputation free survival. Restenosis and occlusion is the main drawback of available endovascular and surgical options. we review the outcome of using plaque debulking in combination with conventional techniques in the treatment of critical limb ischemia
Methods: 65 patients who were referred for endovascular recanalization for critical limb ischemia: Rutherford grade >3, or ABI < 0.3 were treated with atherectomy. in 48 patients debulking was used as the primary and stand alone option for treatment. in 12 patients assisted balloon dilatation was performed and in 5 stents were deployed.
Results: successful recabnalization was achieved in 61 patients (94%). atherectomy was successful as a standalone option in 48 patients (74%). the average ABI pre treatment was 0.23. average ABI post treatment was 0.48. 12 patients were planned for amputation, 2 patients underwent amputation post atherectomy.
Conclusion: plaque debulking as a standalone treatment option or in combination with endovascular angioplasty or stenting appear to be effective a s a limb salvage procedure and may reduce the amputation rate in certain group of patients.

122
Case-Based Review of Breast Imaging in The Young Patient

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Objectives: To outline the role of multimodality imaging of breast cancer in the young patient in diagnosis, management and follow up.
Methods: Cases of 20 patients diagnosed with breast Cancer under the age of 50 years will be discussed.
Results: Breast Cancer accounts for 35.6% of total new cancers in Jordanian females according to National Cancer registry report 2005. Unfortunately, current state of diagnosis of breast cancer in Jordan is in its late stages (III- IV). The presentation of breast cancer in the young patient (<50 years) has a different and usually more aggressive presentation. The case-based review will discuss the following: - Mammographic, ultrasound and MRI findings. - Image-guided biopsy and preoperative localisation. - Postoperative complications and follow up.
Conclusion: Breast cancer detection and multimodality imaging improve standard of care in the young patient by providing staging, proper counseling on the prognosis and a multidisciplinary approach.

123
Spectrum of CT Thorax Findings of Novel Pandemic Influenza A (H1N1) Infection in Oncology Patients

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Objectives: The aim is to describe the spectrum of CT thorax findings of H1N1 infection in a series of oncology patients.
Methods: A total of 16 CT thorax studies of 9 oncology patients (5 males, 4 females) with confirmed work up of H1N1 infection between October and November 2009 were reviewed. The mean age was 31years. All CTs were reviewed by two radiologists for the presence and distribution of the following: ground glass opacities, consolidation, interstitial thickening, nodules, pleural effusion, and lymphadenopathy.
Results: Seven patients had bilateral disease on initial presentation. The remainder presented with unilateral disease. The most common findings in all 16 CT were: ground glass opacities (100%), consolidation (89%), centrilobular nodules (56%), and tree-in-bud opacities (44%). Small pleural effusions were present in 4 patients (33%). No mediastinal nor hilar lymphadenopathy. Abnormalities frequently involved all lobes. Lower lobe involvement was also a common pattern. Five patients had follow-up CT (within 7 to 42 days). 4 patients showed progression of ground glass opacities and variable change of the patchy consolidation and 1 patient showed residual ground glass opacity with near complete resolution of the remainder of findings.
Conclusion: CT Thorax findings of H1N1 infection in oncology patients are similar to other respiratory viral infections. However, ground glass opacities seems to be a universal finding and seems to be the most likely to persist on follow up. Further research in the area is needed.

Hall F Session 4
Radiology

124
Amyotrophic Lateral Sclerosis :Hyper Intensity of the Corticospinal Tracts on MR Images of the Brain: A Case Report

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Objectives: A 47 years old female patient presented with progressive muscular weakness of both legs and arms ,dysarthria, since few months ago , diagnosed as a case of Amyotrophic lateral sclerosis depending on clinical and MRI Findings , which shows striking symmetric hyper intensity in the corticospinal tracts.
Methods: Brain MRI done for the patient shows striking symmetric hyperintensity in the corticospinal tract. On both flair density weighted and T2 weighted images This high signal intensity extended from the sub cortical white matter of the motor cortex and corona radiate (Fig.1), through the most posterior aspect of the internal capsule (Fig.2), through the cerebral peduncles (Fig.3).and in to the medulla (fig 4). coronal MRi imaging demonstrated continuous linear involvement (Fig.5). The hematology, biochemistry, immunoelectrophoresis, thyroid function, CSF, were normal. Electromyography showed acute and chronic denervation with fasciculation, sensory conduction was normal,and autonomic functions were normal.
Results: However, the typical clinical presentation and MRI findings indicated a diagnosis of amyotrophic lateral sclerosis.
Conclusion: In conclusion, it is important to be acquainted with the various imaging characteristics of ALS and to have a high level of suspicion for detecting ALS especially in patients presenting with combined upper and lower motor neuron signs. MRI is the best noninvasive method for detecting and diagnosing ALS and should be used in all patients presenting clinically with motor neuron dysfunction. Positive MR findings correlate with average or rapid progression of the disease, while negative MR findings appear to correlate with slower disease progression.

125
The Role of Magnetic Resonance Imaging in Diagnosing Common Disorders of the Knee: Our Experience at King Hussein Medical Center

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Objectives: The aim of our study was to evaluate Magnetic Resonance Imaging appearances in various conditions affecting the Knee joint, and to calculate the percentages of abnormal findings compared to total studies performed during fourteen months at Radiology department in King Hussein Medical Centre.
Methods: During the period October 2010-January 2012 ,a total number of 308 patients(238 males and 70 females) ,aged 11-52 years old , presented with common symptoms of knee pain at King Hussein Medical Centre, and who performed Knee MRI to exclude meniscus or ligamental injury of the knee , were retrospectively reviewed. Old age groups with degenerative bony or articular processes were excluded from this study. According to clinical follow up, arthroscopic findings and post operative results, the normal, abnormal MRI diagnosis and type of abnormality were recorded.
Results: Out of 308 patients performed MRI for possible knee joint pathology findings, in 179 patients (58.1%) the examination was positive and in 129 patients (41.9%) the examination was normal. The most common abnormality found was tear in the posterior horn of medial meniscus (75 patients) and accounted for 24.4% of total patients examined and represented 41.9% of total abnormalities. The least common abnormality was found in patients with bone infarct, medial collateral ligament tear, meniscus cyst and osteochondritis dissecans, all these represented by one patient
Conclusion: We conclude that MRI is sufficiently accurate in diagnosing common disorders of the knee, with preservation of knee arthroscopy for therapeutic tools preceded by MRI assessment.

126
Incidental Findings Discovered during Coronary CTA at King Hussein Medical Center

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Objectives: Retrospective review of extra cardiac findings discovered during coronary CT scan.
Methods: A total of 400 patients underwent coronary CTA for non-acute chest pain over 2 year period. 308 patients were males and 92 were females. Age ranged between 31-74 years (mean age 61years). Scan was performed on a dual source CT machine using ECG-gated techniques from lung apices down to inferior margins of the heart in a single breath hold. Parameters included KVp of 140, mAs 350, slice thickness 1-mm, collimation of 0.75x16 and pitch of 0.2. A total of 65-80 mL of non-ionic iodinated contrast material used in a rate of 4 mL/s
Results: Of 400 patients, 31 (7.7 %) had extra-cardiac findings requiring follow up or further evaluation. Six patients had pulmonary nodule, one had lung mass, 3 patient had subclinical pulmonary embolism, one patient had inferior vena cave thrombus and 12 patients found to have liver lesion. five patients had lug fibrosis and one had undiagnosed liver cirrhosis.
Conclusion: Incidental findings in coronary CT scan are common and can reveal important findings in extra-cardiac organs so careful examination of non-cardiac structures is recommended.

127
Radiological Evaluation of 250 Cases of Primary Osteogenic Sarcoma: Our Experience at King Hussein Medical and Cancer Centers

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Objectives: Radiology plays a crucial role in diagnosis, work-up and staging of osteosarcoma. The main aim of my study is to analyze and characterize the imaging

findings of a large series of histological proven osteosarcomas with focusing on the nonconventional subtypes trying to correlate the radiological findings with the histological subtypes of the tumor.

Methods: The author retrospectively reviewed the imaging findings of 250 cases with histologically proved primary osteosarcoma. The study was conducted at King Hussein Medical Center and King Hussein Cancer Center, Amman-Jordan during the period 2003-2012. Patient demographics data was recorded. Images from plane radiograph (n =238), angiogram (n =28), bone isotope scan (n =59), computed tomography scan (n =99), computed tomography angiogram (n=29) and magnetic resonance imaging (n =189) were evaluated for the origin site, location, tumor size, matrix pattern, extrinsic and intrinsic characteristics . The sample included 162 males (65%) and 88 females (35%) , with an age range of 12-48 years (mean age, 18.5 years).

Results: The most common histological subtypes were conventional (n=193), telangiectatic (n=14), small cell (n=3),low grade central (n=3), high grade surface (n=2), paraosteal (n=4), and periosteal (n=5) and non specific (n= 26). The most frequent origin site in the long bones is the metaphysis (n=80%) followed by diaphysis (n=9%), and less frequently the epiphysis (n=2%) , (10%) were found in flat bones. The commonest lesion location was distal femur (25%) , proximal femur (18%), proximal humerus (17%), proximal tibia (15%) , spine and flat bones (16%) , other places (9).

Conclusion: This study provides a good correlation between the radiological imaging and histological sub types of osteosarcoma in a relatively large series of osteosarcoma and high light our experience at King Hussein Medical and Cancer Centers.

128
Impact of Dual Time Point 18-FDG PET in the Assessment of FDG Avid Lesions in Patients with Suspected Cholangiocarcinoma

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Objectives: The aim of this study was to assess the value of dual time point18F-fluorodeoxyglucose positron emission tomography (18F-FDG-PET) in differentiating benign from malignant FDG avid lesions in patients with suspected cholangiocarcinoma.

Methods: Thirty-five FDG avid lesions in 24 patients with suspected cholangiocarcinoma were included in this lesion–based retrospective analysis. All patients had whole body 18F-FDG-PET/CT at 60+/- 10 min post FDG injection, and had second time delayed imaging repeated at 90+/-10 min for the upped abdomen. Maximum standardized uptake values (SUV), and retention index (RI) between time point 1(SUV1) and time point 2 (SUV2) were calculated. Anova test and ROC analysis were used in statistical analysis. P value <0.05 was considered significant.

Results: Follow up and histopathology revealed 25 malignant lesions (cholangiocarcinoma) and 10 benign lesions. The average SUV1 and SUV2 for CC tumors were 9 +/- 4.8 and 9.3 +/- 5 respectively (p=0.8). Average SUV1 and SUV2 for benign lesions were 5.3+/- 1.2 and 3.8+/- 1.4 respectively (P<0.01). Average RI for malignant and benign lesions were 104+/-13 and 73+/-24 respectively (p<0.00003). ROC analysis revealed RI>95% as best criterion for malignancy with sensitivity of 84%, specificity of 100% and area under ROC curve of 0.94.

Conclusion: Dual time point 18-FDG PET could have a potential value in differentiating malignant from benign FDG avid lesions in patients with suspected cholangiocarcinoma.

129
Visualization of Normal Appendix during Non-Contrast Renal CT Scan at King Hussein Medical Center

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Objectives: To evaluate the frequency of visualization of normal appendix, its caliber and position among patients without history of prior surgery presenting to Radiology Department for non-contrast renal CT scan in stone protocol.
Methods: A total of 125 patients with no history of appendectomy who underwent non-contrast computed tomography scan in stone protocol for evaluation of their renal colic were included in this study and their images were reviewed. Identification of normal appendix, its contents and location along with the adequacy of intraperitoneal fat were evaluated in both axial, coronal and sagittal planes.
Results: Normal appendices were visualized in 91.2% of cases. The most common location of appendiceal tip was paracolic, and the maximum outer diameter of the normal appendix ranged between 3 and 9 mm (mean 5 ± 1.2 mm). Intraperitoneal fat was adequate in 71%.
Conclusion: Most of normal appendices are seen on non-enhanced MDCT scan in stone protocol as identification of normal appendix is critical to exclude the diagnosis of acute appendicitis among patients with right sided abdominal pain.

130
Endovascular Embolization of Angiomyolipoma: Our Experience at KHMC

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Objectives: To review the outcome of endovascular embolization used to manage angiomyolipoma presenting to our service at King Hussein Medical Center, Interventional Radiology service
Methods: Over the period between January 2009 and March 2012, a total number of 13 patients were referred to our Interventional Radiology service at KHMC, to perform endovascular embolization for asymptomatic angiomyolipoma (2 cases), and bleeding angiomyolipoma (11 cases). The patients were followed up following the endovascular intervention.
Results: Cessation of uncontrolled bleeding was achieved in 10 of the 11 patients who present with bleeding after a single intervention. The remaining patient needed another cession of embolization to control the bleeding. For the two patients who were asymptomatic there was significant reduction in the size of the mass on the follow-up imaging. One patient developed groin access hematoma which was treated conservatively. Two patients suffered from transient elevation in their createnin, which reverted to normal following good hydration.
Conclusion: Endovascular embolization, which is practiced competently at KHMC, is a valuable method which can be used in the management of angiomyolipoma, with high success and low complication rates.

Hall G Session 1
Plenary Session: Difficult Complications of Pregnancy

131
Hypothyroidism in Pregnancy

David James MD (UK)

Hypothyroidism in pregnancy
Hypothyroidism affects 1% of pregnant women and many of the symptoms are encountered in normal pregnancy. Autoimmune hypothyroidism is the most common type.
The main risks are:
For the woman/mother: myxoedema coma, hypertensive disease
For the fetus/newborn: preterm delivery, neurodevelopmental delay (if disease untreated)
The management options are:
Pre-pregnancy:
- Consider diagnosis in those with sub-fertility/menstrual disorders
- Optimize medical therapy-delay pregnancy until good control Prenatal:

- Undertake baseline thyroid function tests (TFTs) as soon as possible
- Use pregnancy specific reference ranges when interpreting TFTs
- TFTs every 3 months; more frequently if dosage adjustments made
- Routine increases in thyroxine not required; make dosage adjustments based on TFT results
- Avoid taking iron supplements at the same time as oral thyroxine
- Check absorption/compliance in those with vomiting
- If clinically euthyroid with subclinical hypothyroidism - early thyroxine treatment appears to reduce the miscarriage rate
- If clinically euthyroid and thyroid antibody positive - monitor TSH levels and only give thyroxine if patient becomes hypothyroid

Labour/delivery:

- Large maternal goiter may cause anesthetic complications Postnatal:
- Observe for signs of post-partum thyroiditis
- Screen for post-partum depression

132
Thrombophilia and Pregnancy

Zarko Alfirevic MD (UK)

This lecture will discuss indications to test for common inherited and acquired thrombophilias, most recent management strategies and implications for research in this complex field.

133
Autoimmune Disease and Pregnancy

Mazen Zebdeh MD (Jordan)

134
Heart Disease in Pregnancy

Wael Husami MD (USA)

Heart Disease complications rate is 4% of pregnancies in women without preexisting cardiac abnormalities. Advances in medical and surgical therapies make Congenital Heart Disease in pregnancy and increasingly common phenomenon. That advancement has yielded a population of women of childbearing age with heart disease requires an experienced multidisciplinary team approach including Cardiologists, Obstetricians, Primary care providers, Midwives and Tertiary care center. The evaluation and management of heart disease in the pregnant patient requires an understanding of the normal physiological changes associated with gestation, labor, delivery, and the early postpartum period. (1)

Congenital heart disease and valvular heart lesions associated with high maternal and fetal risk during pregnancy. However, many patients with CHD and valvular heart disease can be successfully managed throughout pregnancy and during labor and delivery with conservative medical measures designed to optimize intravascular volume and systemic loading conditions. Some woman may need prosthetic valves and the performance of cardiac valve surgery is a complex undertaking in the pregnant patient. (1) Recommendations for choice of the prosthetic heart valves are based on the durability of prosthesis, necessity for anticoagulation, risk of thromboembolism and bleeding, re-operation rate, hemodynamic performance of the prosthesis and possible future pregnancy. Women with prosthetic heart valves exhibit a heightened risk of thromboembolic events during pregnancy. Anticoagulation with warfarn provides protection against these complications, but the use of this drug increases the risk of embryopathy. While pregnant women with bioprosthetic valves are typically spared the need for anticoagulation, they have a higher incidence of valve failure than nonpregnant patients. Thus, the approach to management of pregnant women with prosthetic heart valves differs in some ways from that of other patients. (2) The clinical management of pregnant women with prosthetic heart valves during pregnancy has been difficult and the use of anticoagulation continues to be problematic. (3)

The ACC/AHA guidelines recommend warfarin as the anticoagulant of choice in this patient group through the 35th week of pregnancy. After the 36th week, however, heparin should be substituted for warfarin; should warfarin continue to be used, a caesarian section should be performed to reduce the risk to the anticoagulated infant. The guidelines do not yet recommend any use of LMWHs; it has been suggested that their use be limited to patients with contraindications

to unfractionated heparin.(4) Guidelines for the management of the pregnant patient with a mechanical prosthesis have been difficult to formulate due to the lack of adequate prospective randomized controlled trial data.
The purpose of this presentation, Dr Wael Al-Husami will provide a comprehensive review of heart disease in women with CHD and prosthetic heart valves and the impact of anticoagulation with either warfarin or heparin in the recent therapeutic era and the current controversies surrounding the use of anticoagulation in pregnant women with prosthetic heart valves.

135
Breast Cancer and Pregnancy
David James MD (UK)

Definition: (commonly) carcinoma diagnosed during pregnancy or within 1 year postpartum
Incidence: Second only to cervical cancer in pregnancy-associated cancers; 15% occur in women ofchildbearing age and 3% of breast cancers occur in pregnancy; 10 to 40 per 100,000 pregnancies.
Presentation: Usually presents as advanced disease; 50-75% of pregnant women diagnosed with breast cancer have lymph node metastases; delay in diagnosis is a problem
Prognosis: Present view is that pregnancy has no effect on prognosis apart from that incurred by delays in diagnosis and treatment
Management Options:
- Diagnosis
- Physiological changes of pregnancy reduce the sensitivity of physical examination and mammography
- Fine-needle aspiration should be undertaken of any suspicious lesion
- Open biopsy if results of needle biopsy are equivocal.
- Treatment
- Mastectomy with lymph node dissection is preferred treatment for early cancers
- Indications for lymph node dissection are similar in pregnant and non-pregnant
- Sentinel node localization procedures appear safe during pregnancy
- Adjuvant chemotherapy may be indicated for some patients with high risk cancers, but maternal benefits and potential fetal risks should be weighed carefully
- If diagnosis is made late in pregnancy and chemotherapy or radiation treatment is indicated, consider delaying therapy until after elective delivery
- Therapeutic abortion is not indicated routinely
- Termination of pregnancy may be considered in patients with advanced disease if chemotherapy and/or radiation treatment is indicated in early pregnancy
- Recommend delaying conception for 2–3 yr after treatment

Hall G Session 2
Obstetrics & Gynecology

136
Lateral Hysteroplasty Making the Impossible Possible
Mustapha Chaaban MD (Lebanon)

some uterine malformations may hinder fertility and worsen the reproductive and obstetrical outcome especially in the cases of DES uteri and septate uteri . metroplasty is an intervention to restore a normal uterine anatomy to improve obstetrical outcomes in. hysteroscopic septoplasty cures the septate uterus. It is acknowledged as an effective procedure in the case of recurrent abortion losses. Its value in the case of infertility is still an issue of debate but it probably improves the rate of live birth in women without obstetrical antecedent., because of the simplicity of the gesture and the low complication rate it could be considered in the first line management of infertile women with septate uterus.
enlargement hysteroplasticmetroplasty is not a common trend in the management of infertile women presenting with uterine hypotrophy or dysmorphism due to the paucity of evidence to impose this procedure as a first line management of these types of infertile women it certainly has a positive impact on the obstetrical outcome in patients presenting a uterine hypotrophy or dysmorphy, in particular in women exposed in utero to DES .we proposed enlargement metroplasty to women with infertility and poor obstetrical history and we present to you our results .

137
Endometrial Cancer: Clinical Guidelines of Management
Adnan Hassan MD (Jordan)

138
Hysteroscopy Challenges in Management of Infertility
Mustapha Chaaban MD (Lebanon)

Hysteroscopy permits visual evaluation of the uterine cavity and in the presence of intrauterine anomalies, allows the direct management of these anomalies on a see and treat basis.
Numerous procedures that were once performed to manage intrauterine anomalies and whose damage by far outweighed the benefits from these surgeries have been discarded because of the use of hysteroscopy in the management of these conditions such as the management of uterine septae, endometrial polyps , intrauterine synechiae and submucous fibroids.
The hysteroscopic management of these conditions allows at the same time a painless minimally invasive procedure and a fertility preserving if not boosting procedure.
These advantages, added to the recent reports of an imporved pregnancy rate following hysteroscopy in ivf make hysteroscopy an invaluable tool in the management of infertility.

139
Gynecologic Cancers in Pregnancy: Guidelines of Management
Adnan Hassan MD (Jordan)

Cancer affecting the reproductive system during pregnancy is a complex situation that endangers 2 lives; the pregnant woman and the fetus.
The tremendous therapeutic challenge implicated by this coincidence on one hand and the sparse experience on the other hand demands management guidance.
Literature data on cancers of the female genital tract during pregnancy consist of case reports or small series only.
In this presentation, the author will discuss **method**s of diagnosis and treatment of female genital tract cancers during pregnancy.
Radiology, surgery, radiotherapy and chemotherapy and their effects on the mother and the fetus. Carcinoma of the cervix and ovary during pregnancy will be discussed in more details.

140
Laparoscopic CO2 LASER Treatment of Endometriomas
Mustapha Chaaban MD (Lebanon)

Endometriomas and their effect on fertility and the management of the endometriomas is still an issue of debate.
There are always comparisons between the deleterious effect of endometrioma on oocyte quality and the effect on pregnancy rates versus the long term effects of surgical endometrioma management whether it be on ovarian reserve or even oocyte quality.

A main drawback of endometrioma surgery is the fact that even in experienced hands, simple surgery can lead to a significant depletion in the ovarian reserve which is technique dependent rather than just operator dependent.
We present our technique which depends on the precise and low thermal yielding properties of CO2 LASER in the management of endometriomas.

Hall G Session 3
Obstetrics & Gynecology

141
Fetal Doppler and IUGR
Zarko Alfirevic MD (UK)

This lecture will present systematic review of the evidence to support the use of fetal Doppler in suspected IUGR. We will also discuss pros and cons of routine use of Doppler to screen for IUGR and raise awareness of some practical technical aspects needed for safe and accurate use of Doppler in obstetrics.

142
Hypertension in Pregnancy
David James MD (UK)

The National Collaborating Centre for Women's and Children's Health produces clinical practice guidelines on topics related to women's and children's health for

publication by NICE and use in the National Health Service in England and Wales. The guidelines are based on evidence of clinical and cost effectiveness.
This guideline was published in 2010
The Key Recommendations based on the best evidence cover the following topics/ areas:

1. Measures to reduce the risk of hypertensive disorders in pregnancy
2. Management of pregnancy with chronic hypertension
3. Assessment of proteinuria in hypertensive disorders of pregnancy
4. Management of pregnancy with gestational hypertension
5. Management of pregnancy with pre-eclampsia
6. Advice and follow-up care at transfer to community care

143
Modern management of PPH

Zarko Alfirevic MD (UK)

The lecture will focus on recent clinical trials of various treatment strategies for the management of PPH including misoprostol and tranexamic acid. The data from the recently updated Cochrane review will be presented, together with the recently updated FIGO guideline for the use of misoprostol for PPH.

144
Surgical Management of Placenta Accreta: A Three Years Experience at King Hussein Medical Center

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Objectives: The purpose of this study was to report our experience for surgical management of suspected placenta accreta.
Methods: This was a retrospective study of all patients who underwent planned hysterectomy for placenta accreta at KHMC from august 2009 to October 2011.
Results: Thirty two patients were identified. Diagnosis was suspected on ultrasound scanning in 23 women (6 women also underwent Magnetic resonance imaging) and on 9 women during elective caesarean delivery for placenta previa. In those women (23) who was diagnosed antenatal by ultrasound and MRI underwent cesarean delivery and hysterectomy without attempt of removal of placenta, on 9 women who was diagnosed during C/S were managed initially with Bakery balloon (3 cases), postoperative hemorrhage occurred required reoperation and hysterectomy. Haemostatic stitches, (2cases), 4 cases developed PPH after separation of placenta and all underwent hysterectomy. One case was assessed with interventional radiologist with placement of balloon catheters into the common iliac arteries bilaterally, and inflation the balloon catheters after the delivery of fetus. All of the women were multiparious, with previous more than two cesarean section deliveries. Twenty seven women had a placenta previa, and 5 women had a low anterior placenta. Final pathologic findings revealed accreta (27), increta (4), and percreta (1). Two women had ureteral injury, 8 women had cystotomy, and 1 woman had with vesicovaginal fistula.
Conclusion: Placenta accrete remains a high-risk obstetric condition, adequate preoperative planning with a multidisciplinary team is recommended to reduce the complications associated with placenta accreta

145
Prophylactic Balloon Occlusion of the Common Iliac Artery in a Patient with Complete Placenta Previa and Accrete: New Approach to Bleeding Control during Cesarean Hysterectomy, Case Report at King Hussein Medical Center

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Objectives: Placenta accreta, is an important condition with significant problems at delivery because of incomplete placental separation, hemorrhage, neonatal death, infection, fistula formation, ureteral damage, and bladder injury.

Methods: We report a case of placenta accreta that was managed by staged procedure that involved femoral artery catheterization, classic cesarean section delivery, Temporary balloon occlusion of the common iliac artery before Cesarean hysterectomy for placenta accrete.
Results: successful use of a staged procedure hysterectomy procedure for placenta accreta is associated with decreased maternal morbidity.
Conclusion: We found that the successful use of a staged procedure hysterectomy procedure for placenta accreta is associated with decreased maternal morbidity.

146
Review of the Management and Outcome of Pregnant Women with Heart Disease at King Hussein Medical Center

Naser Al-Husban MD, Dr Ziad Shraideh, Dr Maher Maa'ita*
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Objectives: Review of the antenatal care and the fetomaternal outcome of pregnant women with various heart lesions over one year (July 2011-June 2012).
Methods: Retrospective review
Results: There were 7 cases with congenital heart disease, 18 with valvular disease, 8 with acquired heart disease and one with cardiomyopathy. All patients were under the care of both cardiologists and obstetricians. All patients were delivered at term. The normal vaginal delivery rate was 50%, the caesarean section rate was 44.1% and the instrumental delivery rate was 5.9%. There was one case with severe aortic valve stenosis who underwent termination of pregnancy because of the unacceptable high risk of continuation. Four patients needed intensive care postpartum. There were no maternal mortalities or congenital malformations.
Conclusion: With close collaborative and joint care between cardiologists and obstetricians in a tertiary centre, pregnant patients with heart diseases can be cared for and managed with an acceptable fetomaternal outcome.

147
Perinatal Outcome in Idiopathic Polyhydramnios

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Objectives: To determine if idiopathic polyhydramnios is associated with adverse perinatal outcome.

Methods: A retrospective study method: Sixty-nine women with singleton pregnancies who were discovered to have idiopathic polyhydramnios and who were delivered in a period of sixteen months (July 2002-October 2003). These were compared with 150 pregnant women with normal amount of liquor. Analytic study of preterm delivery (<37 weeks gestation), low birth weight (<2.5 kg), macrosomia (>4.0 kg), malpresentation, Apgar score at 5 minutes <7, rate of C/S delivery, neonatal hospitalization and death was considered. Analysis was done using X2 test.

Results: Hundred and three (4.8%) were found to have polyhydramnios. Among these there were 69 cases of idiopathic polyhydramnios representing 67% of all cases. Other causes were diabetes mellitus occurring in 24.4%, congenital abnormalities and multiple gestation each account for 3.9% Rh. isoimmunisation accounting for about 1%. Idiopathic polyhydramnios was further classified into mild polyhydramnios (AFI 25-30 cm), which accounted for 84% and moderate polyhydramnios (AFI 30.1-35 cm) in 16%. There were no cases with severe polyhydramnios (AFI >35 cm).
Conclusion: Antenatal diagnosis of polyhydramnios requires careful search for associated underlying maternal and fetal conditions. Adverse perinatal outcomes are less in idiopathic polyhydramnios than in polyhydramnios due to a known cause.

148
Clinical and Histological Significance of Atypical Glandular Cells on Cervical Pap Smears

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Objectives: To determine the association between atypical glandular cells (AGC) on cervical cytology and the incidence of clinical significant histology of malignant or pre-malignant genital tract lesions.
Methods: A retrospective study was performed on the files of women who were referred to our colposcopy clinic at King Hussain Medical Centre (KHMC), between August 2008 and June 2012. Among these smears, 60 patients had a diagnosis of AGC. Follow up was available for 52 patients and these patients had histologic follow up including cervical biopsy, endocervical curettage (ECC), and/or endometrial biopsy (EMB). The factors considered included age, parity, symptoms, colposcopic finding, and histologic results.
Results: Of 52 patients with AGC, six (11.5%) were found to have a clinically significant malignant lesions on subsequent histologic follow up, including 3 endometrial adenocarcinoma cases, 1 endocervical adenocarcinoma case, 1 vaginal vault adenocarcinoma case, and 1 squamous cell carcinoma case. Of 52 patients with AGC, eleven (21.2%) were found to have pre-malignant lesions, including 5 cases of squamous intra-epithelial neoplasia (CIN), 1 case of adenocarcinoma in situ (ACS), and 5 cases of endometrial hyperplasia (EH). Woman above 35 years age and low parity were more likely to have a significant histologic abnormalities.
Conclusion: Because about one-third of patients with AGC on pap smear had a substantial risk of having underlying squamous or glandular, premalignant or malignant lesions, colposcopy and directed biopsy, endo-cervical curettage and endometrial biopsy should be performed on all women with AGC especially to those above the age of 35 years.

Hall G Session 4
Obstetrics & Gynecology

149
The Prevalence of Urinary Incontinence in Elderly Women living in Tafila - Jordan

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Objectives: To determine the prevalence of urinary incontinence in a sample of elderly postmenopausal women living in Tafila city in the south of Jordan and to evaluate the reasons for consultation/no consultation with a doctor
Methods: The study was conducted at Tafila military hospital, in the time between August and December 2009.women above the age of sixty years who visited the gynecology clinic for various reasons were asked about difficulties in controlling urination (total number 280 women).The demographic data and a questionnaire was filled in for 130 women (46%) who reported incontinence
Results: Mean age was 72years (age range 60-84)eighty six percent were illiterate (112 women).seventy five percent had more than 5 children (98 women). Only 14% (18 women) were under follow up by a specialist. Thirty women (23%) consulted a doctor on few occasions but problem not solved.63% (82 women) were too ashamed to mention it. fifty five women (42%) thought it was a part of natural ageing.
Conclusion: Physicians need to be more sensitive towards the frequent problem of urinary incontinence. Ways to evaluate and discuss this problem should be sought

150
Cabergoline versus Coasting in the Prevention of Ovarian Hyperstimulation Syndrome

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Objectives: To study the effectiveness of

Cabergoline in preventing Ovarian hyper stimulation, and compare it to coasting method.
Methods: This clinical trial was performed on 90 women in assisted reproductive technologies (ART) cycles at risk of OHSS: having at least 20 follicles in their ovaries (mostly 14mm , measured by trans vaginal scan) and a serum estradiol level ⩽3000pg/ml. Patients were divided into two equal groups. Group A: oral cabergoline 0.5 mg/day was given for seven days after hCG administration. Group B: gonadotrophin administration was halted until serum estradiol levels reached less than3000pg/mL before hCG administration. The main outcome measurements compared were rates of pregnancy and severity of OHSS.
Results: Total number of oocytes retrieved, fertilization rates, and clinical pregnancy rates were higher in group A ($p<0.05$). Even Egg quality (metaphase 2) was better in cabergoline group. Severe OHSS was not found in either group while moderate OHSS was seen in two patients in the cabergoline group versus seven patients in the coasting group.
Conclusion: Cabergoline seems to be a safe drug for prevention of moderate-severe OHSS.

151
The Impact of Combination of Therapeutic and Obstetric Pathology among Military Women During Pregnancy on the Sickness Rate of Children in the Period of Observation

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Objectives: To evaluate the impact of therapeutic pathology of military women on their pregnancy and the health status of the child after the birth.
Methods: The study involved 23 pregnant military women out of those suffering from chronic pyelonephritis and autoimmune thyroiditis. The analysis of medical documentation, aimed at the identification of pregnancy complications and children's diseases diagnosed after birth. The comparison group comprised 23 women of the civilian population.
Results: Chronic pyelonephritis and autoimmune thyroiditis in 23.7% of the cases under consideration led to the development of late gestation, and in 10.2% to preterm PROM. The analysis of the remote consequences showed that the combination of chronic pyelonephritis, autoimmune thyroiditis and late gestation in the mother 1.5 times increases the risk of the development of the hydrocephalus and infectious diseases in children compared with the control group.

Conclusion: The presence of somatic pathology significantly burdens the course of pregnancy, often leading to fetopathy. The analysis of the remote consequences showed that the combination of chronic pyelonephritis, autoimmune thyroiditis and late gestation in the mother 1.5 times increases the risk of the development of the hydrocephalus and infectious diseases in children compared with the control group.

152
Rhinitis during Pregnancy: Risk Factors and Management

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Objectives: To find out the risk factors of rhinitis during pregnancy, discuss a management strategy and how to improve the quality of the pregnancy in women.
Methods: A total of two hundred and fifty primigravida aged 19-28 years (mean age 25) who were referred to otorhinolaryngology clinic as part of antenatal care.
Results: Pregnancy can produce nasal congestion and require modification of treatment strategies. Rhinitis and nasal congestion frequently occur during

pregnancy (30%) and are related to hormonal changes. Smoking and allergy (mainly house dusts) are considered the major risk factors. Nasal saline washings are safe to relieve nasal congestion. Nasal decongestants give good temporary relief of the symptoms, and nasal corticosteroids may be administered to pregnant women when indicated.
Conclusion: Smoking and allergy are the major risk factors for rhinitis in pregnancy, and a quality of pregnancy can be improved by modification of treatment strategies.

153
Adverse Pregnancy Outcomes: Prevalence in Jordan

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Objectives: To estimate the incidence of the adverse pregnancy outcomes among Jordanian women and to determine their association with maternal age.
Methods: A cross – sectional study was carried out in five major hospitals in the north of Jordan, namely: Prince Rashid Ben Alhassan hospital, Princess Badie'ah Hospital, Jarash Governmental Hospital, Al – Eman Governmental Hospital, and Al – Ramtha Governmental Hospital. Women who gave birth in the five Hospitals during the period from April to June 2007 were included in the study. Data were collected within 24 hours of delivery; the mother answered a pilot tested structured questionnaire administered by trained personnel on the maternity ward through face to face interview, which lasted for ten to fifteen minutes.
Results: This study included a total of (3269) women. More than half of women (57%) were living in urban areas, 84.5% were unemployed, and 41.3% had an education of higher than high school. Only 1% gave birth to a very low birth weight baby and 10.9% gave birth to a moderately low birth weight baby. The incidence of low birth weight baby was the highest for women aged > 40 years. Only 1.4% gave stillbirth with the rate being the lowest for those aged between 20 al 34 years. Incidence of giving birth with any congenital anomaly was more evident for the oldest age group where about 40% of cases occurred among women aged > 40 years.
Conclusion: Adverse pregnancy outcomes including preterm delivery, low birth weight delivery, congenital anomalies, and stillbirth are common among Jordanian women compared with that in developed countries. Old women (age > 40) are at high risk of such adverse pregnancy outcomes.

154
Correlation between Pap Smear Testing and Wet Mount Results in Detecting Genital Infections

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Objectives: To assess whether or not inflammatory smears are exclusively a consequence of genital infection.
Methods:102 women aged between 28 and 58 years, attending Al Amira Basma Comprehensive Health Center (Ministry Of Health), from November 2011 to July 2012 entered the study. Pap smear done and wet mount smears evaluated by the family doctor in the C.H.C.
Results: 87.3% of pap smear results were of inflammatory pattern. 52% of wet mount results were associated with infection. 42.2% of vaginal infections were bacterial vaginosis. 9.8% were candidiasis. 48% of wet mount results were normal. 41.6% of inflammatory pap smears were infective (0.02=P Value)
Conclusion: Inflammatory pattern of pap smear is not necessarily due to infection, We have to look for other causes.

Hall H Session 1
ENT

155
In Chronic Sinusitis, Why Antibiotics Don't Work

David S Parsons MD (USA)

The medical care of chronic sinusitis can be a very frustrating problem for patients, medical doctors and Otolaryngologists.

Many patients just don't get better despite prolonged courses of multiple antibiotics. A review of these patients often shows that in reality, the courses of antibiotics actually make them feel worse. In many of these patients, sinus surgery is only marginally successful and the patients remain displeased with their health care. This study will discuss why so many patients suffer because of the antibiotics. We will discuss options that avoid antibiotics and make the patients feel much better. If properly instituted before surgery, many of these patients can avoid sinus surgery entirely.

156
Treatment of Nodal Metastases

K Thomas Robbins MD (USA)

Nodal metastases associated with head and neck cancer has a pronounced negative effect on survival. The treatment planning of the primary lesion must include the possibility of this event, for which the treatment should be performed at the same time. The presence of advanced nodal metastases can be managed with both surgical and non-surgical modalities and should be coordinated based on the optimal treatment regimen for the primary. This talk will emphasize the applicability of various modalities including the selective neck dissection and the use of chemoradiation for treating nodal metastases.

157
Management of Recurrent Laryngeal Nerve Injury

Gayle Woodson MD (USA)

Laryngeal paralysis can occur as a complication of surgery in the neck, such as thyroid surgery or cervical spine surgery. In some cases, transection of the nerve is recognized at the time of the injury. Management of an acutely transected nerve is controversial. In the past it was believed that repairing the nerve would lead to spasmodic dysfunction. But recently, evidence indicates that the best management is either nerve repair, or reinnervation using a branch of the ansa cervicalis nerve. When vocal fold paralysis is noted after surgery, the extent of injury is usually not known. If the recurrent laryngeal nerve has been transected, the nerve will usually regenerate, but the larynx will not recover normal function because of synkinesis. Acrushed or bruised nerve may recover. Electromyography is helpful in determining the prognosis for spontaneous recovery. It is generally accepted that permanent surgery to correct laryngeal paralysis should be delayed as long as there is a chance for recovery. However, recent reports suggest that early surgical intervention leads to superior results. The optimal surgical treatment depends on the position and residual muscle activity of the paralyzed vocal fold.

158
The Mini-FESS, an Extraordinarily Successful Method

David S Parsons MD (USA)

Sinus surgery can be very complex, very demanding, and carry an increased risk of serious complications. But there are many sinus patients in whom a simple procedure can be used to gain extraordinarily successful results with almost no complications. The Mini-FESS was first described in the early 90's in the English literature. Since that time, it has been used all over the world with outstanding results requiring very few revisions. A review of the pathophysiology of sinus disease will be offered to explain why such a simple number of surgical steps can result in excellent outcomes. The steps of the Mini-FESS will be described and discussed.

159
Treatment of Larynx Cancer

K Thomas Robbins MD (USA)

Better treatment options for laryngeal cancer using both surgery and non-surgical modalities have emerged over the past decade. This has resulted in improved survival from this disease as well as a higher proportion of patients maintaining laryngeal function. Multidisciplinary treatment planning is an important process in selecting the optimal therapy for each patient. The presentation will outline the current treatment modalities and their indications based on the characteristics of the tumor, the patient, and treatment tolerance. Expected outcomes for disease response and preservation of organ function will be provided.

160
Management of Bilateral Laryngeal Paralysis
Gayle Woodson MD (USA)

Bilateral laryngeal paralysis usually results in severe airway obstruction, because the vocal folds do not abduct during inspiration. One treatment option is tracheotomy, which bypasses the larynx to relieve obstruction without further compromise of the capacity to speak. However, a tracheotomy is a significant functional and social handicap, and most patients would prefer to avoid this if at all possible. Other options include removing tissue or fixing the vocal fold laterally to statically enlarge the glottis. This improves the airway somewhat, but does not restore normal breathing, and the airway is improved at the expense of the voice. Recent evidence indicates that patients with vocal fold paralysis have inadequate abduction, but the vocal folds are maintained near the midline by adductor muscle function. A new procedure, arytenoid abduction, rotates the arytenoid laterally to enlarge the airway, but does not abolish adduction, so that the voice is preserved.

Hall H Session 2
ENT

161
Canal Wall up Mastoidectomy in Developing Countries
Michael McGee MD (USA)

There is a large volume of literature, lectures, published articles, talks and presentations on canal wall up versus canal wall down procedures. On the international scene, concerning this attention, the weight involves the developed world. This presentation is geared toward developing countries and involves the thought processes of what to do and why.

162
Surgical & Nonsurgical Management of Voice Problems
Gayle Woodson MD (USA)

Voice problems may result from anatomic lesions of the vocal fold, neural lesions, or misuse or abuse of the voice. Most often, the problem is multi-factorial. Voice misuse can result in anatomic pathology, such as cysts or polyps. Conversely, patients with laryngeal lesions can develop maladaptive speech patterns that further degrade the voice. Therefore voice problems are best managed by a collaboration between the otolaryngologist and the speech pathologist. Thorough evaluation is needed, to identify all contributing factors. Some patients with organic lesions, such as nodules or polyps, can be greatly improved with appropriate voice therapy. Other lesions require surgery. These patients will heal better if they receive peri-operative voice therapy.

163
Ossicular Reconstruction Update
Michael McGee MD (USA)

This ossicular chain reconstruction presentation centers on what materials to use and why to use them. This presentation speaks to the reasoning for what kind of prosthesis to use. It also points to critical thinking as to why to use certain materials. Hopefully this will help concerning what material should the listener use, why to use it and should be helpful to know when to switch.

164
Evaluating the Complex Pediatric Airway
David S Parsons MD (USA)

The pediatric airway is small and very dangerous. Complications of airway disease can be life threatening. Understanding how to effectively examine the airway is essential. Knowing specifically what to look for, and the symptoms it may cause, greatly reduces the potential for complications. An extensive review of pediatric airway pathology will be offered with effective steps to care for these children's unique health needs.

165
Organ Preservation Protocols for Head and Neck Cancer
K Thomas Robbins MD (USA)

The addition of chemotherapy agents to radiation has resulted in the development of new protocols in the non-surgical management of advanced head and neck cancer. This presentation will review the progress of such trials while emphasizing the current status for this treatment approach. The recent understanding of HPV oncogenesis and the development of biologic agents with their potential to be used selectively as targeted therapy will be outlined.

166
Early Cochlear Implant
Michael McGee MD (USA)

All cochlear implant research points to early intervention. This clinically has proven true. This lecture presents the fine nuances of cochlear implantation related to pediatrics and the necessity of early implantation.

Hall H Session 3
Physical Medicine & Rehabilitation

167
5-Years Experience of the Queen Rania Rehabilitation Centre Cologne
Eckhard Schoenau MD (Germany)

"On your feet" is not a clinical trial but a routine procedure and component of the basic health care system in Germany. It is carried out in Queen Rania Rehabilitation Centre equipped for the requirements of the concept and affiliated to the Children's University Hospital Cologne.
The new concept "On your feet" combines innovative technical strategies with classical forms of whole body of whole body vibration, resistance training, treadmill training and physiotherapy. The children benefit from an amelioration in all International Classification of Functioning, Disability and Health (ICF) levels (body structure and function and activity and participation) by restored bone mass, increased muscle force, better motor function, and better participation in all day living activities.
The concept "On your feet" is designed to apply the full diversity of treatment approaches as agreed with the health insurance providers in Germany. Therapy components were determined by utilising whole body vibration (Galileo®) as a reflective (neuro-muscular) possibility to activate muscular contraction beyond the conscious ability of the child.
Since the concept "On your feet" started in 2006 up to March 2012 1166 patients take part in the concept.
In Gross Motor Function Measurement the group above age ten improved significantly in crawling and kneeling and children below age ten in sitting, crawling and kneeling and standing;
The new physiotherapy concept "On your feet" had a significant effect on all dimensions investigated and seems to be feasible to improve BMC, muscle force and gross motor function in children with neuro-musculo-skeletal diseases

168
Rehabilitation after Total Joint Replacement
Ziad Hawamdeh MD (Jordan)

Total joint replacement, or arthroplasty, represents a significant advance in the treatment of painful and disabling joint pathologies. Such surgery can be performed on any joints of the body, including the hip, knee, ankle, foot, shoulder, elbow, wrist, and fingers. Among these procedures, hip and knee total joint replacements are by far the most common The number of joint replacements that are performed annually has been increasing steadily. In 2004, 234,000 total hip replacements (THRs) and 478,000 total knee replacements (TKRs) were performed in the United States. The number of surgeries performed each year increases and the indications extend to younger as well as older patients.
Based on existing research evidence, TKRs and THRs are safe and cost-effective treatment for alleviating pain and restoring physical function in patients who do not respond to nonsurgical therapies. There are few contraindications to this surgery as it is currently used. Overall, they have been shown to be a very successful, relatively low-risk therapy despite variations in

patient health status and characteristics, type of prosthesis implanted, orthopaedic surgeons, and surgical facilities. Improvements can be made in overall success of surgeries by addressing each of these areas of variation through further research.

Postoperative rehabilitation is of the utmost importance in order to ensure pain-free function of the joint and improve the patient's quality of life and to reduce the risk of post-operative complications.

Rehabilitation starts before surgery by preoperative patient education regarding surgery, preoperative exercise program and precautions after surgery and continues postoperatively to reduce the risk of complications, postoperative pain and to improve range of motion and muscle strength and functional rehabilitation to achieve maximal possible level of function.

169
Mechanography - A New Device for the Assessment of Muscle Function in Pediatrics

Jörg Oliver Semler MD (Germany)

The development of the musculoskeletal system in children and adolescents became an important topic in the field of pediatric research when the connections between muscle force and bone diseases were revealed. The present study focused on reference values of ground reaction forces, which derive from muscle forces of the lower limbs. Specifically, the study investigated the relationship between anthropometric characteristics and peak jump force, and peak jump power. The parameters were assessed by jumping mechanography using the Leonardo Jumping Platform. The analysis of the parameters revealed that forces deriving from the motor performance of jumping follow an exponential relationship to body size parameters. There-fore, with consideration of anthropometric characteristics, the assessment of ground reaction forces might provide a novel, inexpensive, and accurate approach for the assessment motor performance in children and adolescents.

Furthermore most recent data on the usage of mechanography to determine basic parameter of gait analysis will be presented.

Conclusion, the present study presents reference values of ground reaction forces measured by mechanography in children and adolescents. The establishment of reference values will be a useful and inexpensive device for assessing of the motor system in children and adolescents. The present data might serve to inform scientists and pediatricians about the relationship between body size and ground reaction forces in children and adolescents.

170
Children with Congenital Limb Deficiency

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Objectives: to determine the demographic characteristics, types, levels of congenital limb loss, etiological factors, prosthetic fitting in children with congenital limb deficiencies and to compare it with other studies.

Methods: Patients with congenital limb deficiencies attended to the National Center for Amputee Rehabilitation /King Hussein Medical Center/ Royal Medical Services in Jordan between January 1988 and January 2010 were reviewed, and the demographic characteristics were analyzed.

Results: 143 children with limb deficiency were reviewed. 62 (43.4%) were males and 81(56.6%) were females, with males to females ratio 1:1.3. The mean age at the first visit to the clinic was 7.15 years. The total number of limb deficiencies involved was 170 limbs of which 95 were upper limb and 75 were lower limb deficiencies. 91 limbs were right sided and 79 limbs were left sided deficiency. The transverse limb deficiency was more than longitudinal limb deficiency, 112 and 58 respectively. The most common deficiency was the transverse forearm partial deficiency (below elbow) followed by transverse forearm total deficiency (elbow disarticulation) in the upper limbs. The longitudinal femoral partial deficiency followed by transverse leg partial deficiency (below knee) was the commonest in the lower limb. 107(75%) children were fitted with prostheses. No definitive cause for the limb deficiency in children was found.

Conclusion: This study as the first in the country concerned with congenital limb deficiency form a baseline for further new studies. It helps in future planning management and future planning of material, facilities, budget needs for children with limb deficiency.

171
The Clinical Outcome in Patients with Thoracic Outlet Syndrome after Trans-axillary Approach

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Objectives: In this study we present the use of trans-axillary approach for the first rib resection in patients with thoracic outlet syndrome at King Hussein medical center over the 10 year period between 2000 and2010.
Methods: The data of thirty two patients operated at king Hussein medical center were analyzed with respect to gender, age duration of symptoms and the outcome with a follow up of 1-5 years.
Results: The rates of favorable and poor surgical outcomes were 84.4% and 15.6%, respectively. The subgroup of symptoms duration, the subgroups of ulnar nerve conduction velocity and the presence of cervical rib showed a significant correlation with outcome. The shorter duration of symptoms and the presence of cervical rib had a significant unfavorable effect on the outcome.
Conclusion: Trans-axillary first rib resection is the correct treatment for patients with thoracic outlet syndrome. Among the clinical predictor that may influence the surgical outcome, the duration of symptoms and the presence of cervical rib seems to be the most potential predictors.

172
Characteristics of Elderly Postmenopausal Women with Falling Down

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Objectives: Objective: To describe the incidence, causes, injuries and medical conditions associated with falls in a sample of elderly female patients.
Methods: From May to December 2010,three hundred women attending the rehabilitation outpatient clinic at Queen Alia Hospital were asked about falling down. 160 patients who suffered at least one fall were interviewed regarding risk factors, causes and the results of falling down.
Results: seventy percent (112 patients) fell down once, thirty percent (48 patients) experienced more than one fall during the past year. Age range was 60-84 years (mean 72 years).Most of our patients fell inside their homes (128 patients=80%),76% fell from standing height(122 patients). Falling down resulted in hip fracture in twenty cases(12%),other fracture in thirty one cases(19%) .The rest of patients suffered soft tissue injuries. Causes of falls as reported by the patients were: tripped and slipped in 136 cases (85%) followed by dizziness in 48 cases (31%) and lower limb pain and weakness in 61 cases (38%).
Conclusions: The results of this study provide some insights into the characteristics and circumstances of falls in physically active post-menopausal women living in the community, which may assist with the development of future falls prevention policies.

Hall H Session 4
Physical Medicine & Rehabilitation

173
Spinal Injury: a Multi-System Disorder

Aheed Osman MD (UK)

This talk will give an overview of the acute management of different types of spinal cord injury.
The different modalities of conservative management of spinal injury and possible indication of surgical treatment will be discussed.

Early and late complications and the multi-system disorder secondary to the spinal injury will be discussed in detail.
Recent advances in the management of spinal injury will be discussed.

174
Use of Serological Markers for the Evaluation of Patients with Rheumatoid Arthritis

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Objectives: To determine the frequency of antinuclear antibody. rheumatoid factor. and cyclic citrullinated peptide antibody in patients with rheumatoid arthritis and to compare cyclic citrullinated peptide antibody in patients with rheumatoid factor.
Methods: Our study was conducted in princess iman center for research and laboratory sciences at king Hussein medical center in a period from august 2011 to november 2011 .hn this study 115 patients from arthritis were examined. For all we measured the antinuclear antibody (indirect immunofluorescence). Cyclic - citrullinated peptide (enzyme linked immunosorbent assay) , rheumztoid factor (agglutination assay).
Results: Out of 115 patients with arthritis. 97 were females and 18 were 18 males. Median age was 57.5 years for males and 48.5 years for females.60%(69) of patients wrer positive for antinuclear antibody.55%(64)of patients were positive for three serological markers (cyclic -citrullinated peptide antibody antinuclear antibody and rheumatoid factor). For these patients further investigations were done such as dsDNAand extractable nuclear antibody (ENA).and were negative for both. only 5 patients of 115 were positive for antinuclear antibody alone with speckled pattern, of them 4 had high titer (>1/160) and positive for ENA and 1 had low titer (1/80) and negative for ENA. The incidence of cyclic citrullinated peptide antibody and rheumatoid factor was 79.1%(91) and 81.7%(94) respectively.23.4%(27) of patients had positive for both serological markers (anti-ccp and RF).
Conclusion: For evaluation patients with suspected rheumatoid arthritis recommended perform cyclic citrullinated peptide antibody and IgM – rheumatoid factor. the results of both tests are informative, since a positive result for either test increase diagnostic sensitivity, while the specificity is increased when both tests are positive.

175
Intrathecal Baclofen and it's Role in Managing Severe Spasticity

Aheed Osman MD (UK)

Intrathecal Baclofen is effective because it works directly on the required site of action in the spine.
Selection and assessment of patients should be carried out by a multidisciplinary team with experience in different modalities of spasticity management. Inclusion and exclusion criteria for selection should be clear to the clinician. The procedure of insertion of Baclofen pump will be discussed together with possible complications.

176
The Use of Wedged Insoles inside the Shoes for Treatment of Patients with Mild to Moderate Knee Joint Pain due to Osteoarthritis and Narrowing Joint Spaces

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Objectives: To determine the benefit and how much reduce the degree of pain by the use of wedged insoles, inside the shoes of patients with knee joint osteoarthritis and narrowing spaces.
Methods: In a hospital based study included 58 patients suffered from knee joint pain because of mild to moderate osteoarthritis and narrowing joint spaces, 21 males and 37 females attended the outpatient clinic of the physical and medical rehabilitation at the rehabilitation center in the King Hussein Hospital, Amman, Jordan, in the period between January and December 2011. Their age ranged between 50 to 70 years. The visual analogue scale of pain was calculated and compared before and after the application of the wedged insoles are an in-shoes orthotic to manage knee osteoarthritis.
Results: The body mass index (kg/m2) was significantly higher in females (28.9 ± 3.2) than in males (27.4 ± 2.0) P-value = 0.046. The visual analogue scale of pain before the study was (4.4 ± 1.6) then after application of the wedged insoles inside the shoes of patients with knee osteoarthritis the visual analogue scale (2.3 ± 0.9) was significantly decreased, t-test = 18.9 and P-value < 0.001.
Conclusion: Conclusion: The use of wedged insoles inside the shoes of patients with knee osteoarthritis and narrowing joint space had to be significantly alleviating the pain, useful alternative technique, and reducing the consumption of non-steroidal analgesics, which is not free from adverse effects.

177
The Relationship between Uric Acid and Triglyceride among Gouty Patients; Experience at Prince Hashem Bin Al-Hussein Military Hospital

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Objectives: To determine the relation between serum uric acid and serum triglyceride among gouty patients.
Methods: In across-section study included 33 patients (22 males and 11 females) with gouty arthritis were seen as outpatient at the physical and medical rehabilitation clinic at Prince Hashem Ben Al-Hussein Military Hospital, in the period between January and May 2012. Their age ranged from 41 to 71 years. Fasting triglyceride and uric acid were done. Bivariate correlate analysis was done between triglyceride and uric acid.
Results: A significant positive correlation was found between serum uric acid (8.5 ± 1.4 mg/dL) and serum triglyceride level (366.7 ±163.7 mg/dL) [Pearson Correlation = 0.433, P-value = 0.012].
Conclusion: Raised triglyceride level has been associated in patients with clinical gout. Hereby diet restriction and weight reduction has an important role in the prevention and treatment of gout.

Hall I Session 3
Allied Health Professions

178
Vestibular Rehabilitation

Alia Alghwiri PhD (Jordan)

Vestibular disorders are commonly reported health conditions that lead to debilitating consequences. Activity limitations and participation restrictions are the main disabling consequences of vestibular disorders. Measuring activities and participation in people with vestibular disorders has been a challenge due to the absence of specialized outcome measures that quantify activities and participation based on a standardized framework such as the International Classification of Functioning, Disability and Health (ICF). The Vestibular Activities

and Participation (VAP) questionnaire was developed to quantify activity limitations and participation restrictions in people with balance and vestibular disorders. Of the 34 items included in the VAP, 29 (85%) of the items had at least 25% or more of the respondents report that they had moderate to severe difficulty and 10 items had 40% or more of the participants report that they had difficulty with the activity or participation item. The psychometric properties of the VAP were examined and demonstrated very good reliability and validity in persons with balance and vestibular dysfunction and may be helpful in identifying activity and participation limitations.

179
The Impact of Spinal Cord Injury on Recreational Activity

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Objectives: The aim of the study is to identify the impact of Spinal cord injury on recreational activities, and how they spend their time.
Methods: The study was conducted on 30 patients known to have different levels of spinal cord injury. A questionnaire was randomly distributed to collect the required information by personal interviews at Royal Rehabilitation Center.
Results: Males constituted a percentage of 63% of the study group were as females were 37%. The majority of the sample aged between 22-33 years (15 patients) which represent 50% of the sample The study group also showed different levels of education with predominance in the elementary levels. This might be explained by the level of occupational conditions and state of awareness in elementary educated groups. The main activity they do after the injury is watching T.V (25 patient) which represent 83% in daily base. The minimal activity as the sample showed is agricultural interest (19 patients) which represents 63% of the sample.
Conclusion: The low education level maybe the cause of do not doing any activities apart from watching T.V, the level of the injury may play a big rule in the activity that the patient practice. The psychological and the facilities maybe another cause should be considered in future studies which might affect the activity that the patient may practice after the injury.

180
Frequently Asked Questions: Iodinated Contrast Agents

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Objectives: Even though iodinated contrast agents are safe and widely used, people still wonder whether they are safe or not. Some questions are easy to answer and some other still need an elaborated explanation and further investigation
Methods: Frequently asked question is whether informed consent necessary before all contrast media injections- the answer is no. Another question concerns use of contrast media in patients with prior reactions or allergies. They can be safely used in such patients, but special care must be taken. The protective role of pre-treatment with steroid can function well with the minor reactions but not the major ones. It is important to realize that even life-threatening, anaphylactiod reactions do not necessarily happen because of a true allergy to contrast media. Many questions are being asked regarding contrast agents- induced nephropathy. Baseline serum creatinine values should be obtained in patients who are at risk, not all patients. The incidence and natural history of contrast agent-induced nephropathy is still unclear. It happens only to patients with compromised renal function before contrast agent injection, but even patients with normal serum creatinine can have a real dysfunction.
Results: result in most patients is benign with progression to end-stage renal disease being rare. The risk factors are renal dysfunction, long standing diabetes mellitus, dehydration, and use of other nephrotoxic medications.
Conclusion: Calculated creatinine is a

better way to determine risk and to follow thus complication.

181
Comparison of the Versa TREK Blood Culture System Against The BACTEC MGIT 960 and Conventional Culture Method for the Detection of M. Tuberculosis

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Objectives: The aim of this study was to evaluate the reliability of Versa TREK system for detection of M. tuberculosis compared with results obtained with Bactec MGIT 960 system and Löwenstein – Jensen medium
Methods: A total of 50 different clinical specimens (25 Bronchial wash, 19 sputum, 3 pleural fluid, 1 CSF, 1 pericardial effusion and 1 ascitic fluid) from patients with suspected tuberculosis were evaluated with two known positive samples control over two months (Oct. – Nov. 2011) at King Hussein Medical Center. Clinical specimens were processed using the standard N-acetyl-L-cysteine (NALC)-NaOH **method**, then inoculated onto Versa TREK system, BACTEC MGIT 960 and Löwenstein – Jensen slants at the same time.
Results: Of 50 specimens cultured, a total of 1 positive specimen for mycobacterial isolated after 6 days from inoculation onto both Versa TREK system and BACTEC MGIT 960, and after 10 days on Löwenstein – Jensen slants, with smear – negative , in addition to two positive sample control. Overall, mycobacterial positivity rates were equivalent 2% for all cultural methods applied excluding the two positive sample control.
Conclusion: The Versa TREK system is validated for the detection of M. tuberculosis, and was equivalent to BACTEC MGIT 960 when accessing total mycobacteria positivity rates for specimens submitted from patients with suspected tuberculosis . Detection and recovery rates for all of these broth - culture systems are comparable to each other despite the principle of their technique and superior to those of conventional solid media

182
IS/IT Strategy for the Queen Rania Al-Abdullah Hospital for Children

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Objectives: QRHC is managed, operated and financed by the RMS. IS/IT strategy sets a clear guide and steps need to be taken and address current weakness and opportunities to reach. One major step towards enhancing healthcare services is operational improvements with the objective of optimizing efficiency and containing costs, while improving quality of services. IT is seen as a key enabler to improve healthcare processes due to its potential of providing rapid access to information at the point-of-care.
Methods: This works is based on strategic analysis of existing systems, the review of academic literature and the 21 years personal experience of the author at RMS. It will focus on the E-health strategy as part the national E-Health program (Hakeem) that is planned to cover all Public hospitals and clinics.
Results: IS/IT strategy is intended to provide QRHC with the IS/ IT systems that allow business benefits that is safe, efficient, effective, timely, evidence based, patient centered and equitable to all patients
Conclusion: This IS/IT strategy is intended to provide QRHC with the professional IT systems that allow business benefits that are safe, efficient, effective, timely, evidence based, patient centered and equitable to all patients. To justify the support of the decision makers IS/IT should be looked at as strategic business units.
The alignment of IS in support of the organizational objectives and strategies has been among the top concerns, failure to can result in lost opportunities, wasted resources and consequent unfavorable performance.

183
Spinal Deformity

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Objectives: The aim of this study was to determine the demographic data for spinal deformity in relation to age, sex, causes, levels and types of deformity.
Methods: This study included 80 patients, randomly selected where seen in Orthotic Prosthetic Department in Royal Rehabilitation Center, King Hussein Medical Center, Amman- Jordan, between May 2011 to May 2012.
Results: This study included 80 patients, 48(60%) of them were male , with male female ratio was 1.5:1 , 46(57.5%) of them were under 10 years, 25(31.25%) of them were between 10-20 years, 9(11.25%) of them were more than 21 years old. The Scoliosis was more affected, it involved 66(82.5%) , Kyphosis 3 (3.75%) , Lordosis 2 (2.5%), and fracture 9(11.25%). The leading cause of spinal deformity was Cerebral Palsy 29(36.25%) ,Congenital 19(23.75%), Spinal cord injury 10(12.5%) , Idiopathic 10(12.5%) , Fracture 9(11.25%), and 3(3.75%) due to muscular disorder. The dominant level of spinal deformity was Thoracolumbar 59(73.75%), Thoracic area was 11(13.75%), Lumbosacral 9(11.25%) and Cervicalthoracolumbar 1(1.25%).
Conclusion: The Scoliosis is the most common seen in spinal deformity, specially affected Thoracolumbar area, Congenital deformity was dominant in the age under 10 years, so that we can apply corrective measure (3 point pressure) on them. While Fracture was more dominant in the age above 21 years, so that we can apply supportive measure on them.

184
Spectrum of Beta-Thalassemia and other Hemoglobinopathies over Six Years Experience at Princess Iman Research and Laboratory Sciences Center in Jordan

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Objectives: The purpose of this article is to presents the spectrum of Beta thalassemia and other hemoglobinopathies at Princess Iman Research and laboratory Sciences Center in Jordan.
Methods: Nineteen thousand and two hundred fifty six (19256) cases of anemia were received from different peripheral hospitals at our lab during the period of 2006-2011 .Hematological parameters were measured on Sysmex(XE-2100),(XT-2000i). Hb analysis was performed by variant II Hemoglobin testing system based on High Performance Liquid Chromatography (HPLC) used to separate and determine area percentages for hemoglobins (A,A2,F) and other variant hemoglobin include hemoglobins (S,C,D,H, and E). Family studies were carried out to confirm the diagnosis.
Results: Most common hemoglobinopathies out of 19256 cases were :Beta thalassemia trait 6204 (32.24%), Beta thalassemia major 150 (0.8%), sickle cell trait (HbA/S) 250 (1.3%), sickle cell disease (HbS/S)75 (0.4%), compound heterozygous for Hb S with Beta thal 60(0.3%), Hb H disease 50 (0.26%), Hb C trait (HbA/C) 48 (0.25%), Hb C Disease (HbC/C) 6 (0.03%), Hb E trait (Hb A/E) 25(0.13%), Hb E disease (HbE/E) 7(0.04%), HbD trait (HbA/D)15 (0.08%), Compound heterozygous for hemoglobin C with hemoglobin S(Hb C/S) 4(0.02%), and 2320(12%) of analysed sample were alpha thalassemia and 10042(52.15%) were normal hemoglobin pattern.
Conclusion: The heterozygous of Beta thalassemia population is the most common of all hemoglobinopathies in our study. This study suggest a high incidence

levels of beta thalassemia which suggests screening programs and management for antenatal diagnosis as well as increased awareness and educational screening programs to control the birth of homozygozity of Beta thalassemia.

185
The Role of Teleradiology In the Royal Medical Services

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Objectives: Teleradiology is the transmission of radiological patient images, such as x-rays, CTs, and MRIs, from one location to another for the purposes of sharing studies with other radiologists and physicians. teleradiology utilizes standard network technologies such as the internet, telephone lines, wide area network, local area network (LAN) and the latest high technics being computer clouds.
Methods: Prospective data were collected from peripheral hospitals to King Hussein hospital in the period from 1/1/2012 to 1/6/2012. patients referred without the facility of teleradiology (Group 1), were compared to similar patients referred with teleradiologic images (Group 2).
Results: There were 18 patients in Group 1 and 45 in Group 2, of which 61 were transferred. That's provide that's teleradiology is a technology help treated doctors to tack rapid decision about patients treatments epically in traumatic diseases and reduce time and money when we repeat examination.
Conclusion: Our findings indicate that teleradiology has an important role in diagnostic and treatment diseases.

186
To Investigate the Relationship Between Hematocrit Values using Two Different Methods

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To Investigate the Relationship Between *Hematocrit Values using Two Different Methods*

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Objectives: To investigate the relationship between the readings of hematocrit values using two methods.
Methods: Values of blood hematocrit for fifty patients at Queen Alia Heart Center were obtained using two different **method**s, a fully automated hematology analyzer, and a blood gas analyzer. T-test was used to investigate any differences between the two methods. The mean for the hematology analyzer was 31.7 and the mean for the blood gas analyzer was 35.48.
Results: There is a significant difference between the two groups and p value is < 0.005
Conclusion: Values for hematocrit readings using the two methods are not consistent. The value for the hematology analyzer is more reliable since it can be further verified with a different but equivalent reading of the same sample namely hemoglobin value.

187
Wound Myiasis Caused by the Common Green Bottle Fly (Lucilia sericata): Case Report at the Royal Medical Services

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Objectives: Care should be considered while changing wound dressings to prevent infestation of open wounds by the larval stages of this fly. Window screens in houses and hospital and control of the common green fly may reduce the risk of this rare form of wound infestation.
Methods: Recovered larvae were fixed in 70% ethyl alcohol and sent to the Jordan University of Science & Technology for identification. Microscopic examination of the spiracles and the anterior hooks revealed that these larvae represent third and fourth instar larvae of the common

green bottle fly, Lucilia sericata. They measured between 8.2-13.2 mm (average 11 mm).

Results: Lucilia sericata is a common fly found in rural areas close to animal farms. Larvae are primarily deposited in carrions. The adult stage of the common green bottle fly was found near the house of the patient

Conclusion: This is the first report of wound infestation by the common green bottle fly in Jordan. Care should be considered while changing wound dressings to prevent infestation of open wounds by the larval stages of this fly. Window screens in houses and hospital and control of the common green fly may reduce the risk of this rare form of wound infestation.

188
Statistical Analysis for UTI at KHMC During 2011

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Objectives: to detect the most common cause for UTIs in a number of patients appearing symptoms at KHMC during 2011.

Methods: A mid stream morning Urine samples had received in sterile container from patients with different ages and gender, from various sections and clinics, cultured on blood agar, MacConkey Agar and plates were incubated at 37C° for 24h. Counts of > 104 colony forming unit (CFU) /milliliter of urine were considered significant. The ID of the isolates was performed by using the VITEK2 according to manufactures - instructions (bioMérieux, France).

Results: Out of 14.369 received urine samples, a total of 3056 (21.3%) uro-pathogen were isolated. Children patients Calculated 1161 (37.9%), whereas adults counts for 1895 (62%) Out from positive cultures, Females have a higher risk for UTIs than males with average (2:1). The major cause for the UTI was E.coli with 1795 (62%), followed by klebsiella sp with 331 (11.5%), Candida. sp with 195 (6.8%), Pseudomonas. Sp 140 (4.9%) and, Enterococcous .sp with 134 (4.6%).The lowest occurrence was seen in Stenotrophomonas.sp, Salmonella sp, and Trichosporon, with only one positive culture for each with 0.03%.

Conclusion: Results showed that E.coli is the most common pathogen isolated from patients with UTI during the year 2011. Better education on symptomatic bacteriuria is required among various populations.

Hall I Session 4
Allied Health Professions

189
Quality Assurance in Regional Hyperthermia Treatment (RHT) is Predictive for Treatment Outcome in Solid Tumors

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Objectives: Background: The benefit of RHT in combination with chemotherapy or/and radiotherapy has been shown in different phase-III-studies in Europe and the USA. Additional phase-II-studies show the palliative effect of hyperthermia. Since 2009 is RHT in combination with chemotherapy part of the ESMO (European Society for Medical Oncology), since 2011 included in the NCCN (National Comprehensive Cancer Network) guidelines for soft tissue sarcomas. Therefore many hyperthermia centres have been established since the last years. However, only a limited number are making an effort to establish quality assurance.

Methods: A guideline is provided for the implementation of RHT under strict rules of quality assurance. The objective is to guarantee a comparable and comprehensible method in the treatment and scientific analysis of hyperthermia treatments. According to this guideline, hyperthermia treatment is only applied in combination with chemotherapy and/or radiotherapy. The guideline is based

on practical experience from several hyperthermia centres.
Results: The European Society for Hyperthermic Oncology (ESHO) and the Interdisciplinary Working Group Hyperthermia (IAH) in the German Cancer Society defined an extensive guideline for RHT as part of an overall quality assurance. The guidelines contains recommendations for hyperthermia treatments, including indication, preparation, treatment, and standardized analysis.
Conclusion: Only RHT treatments, which fulfill the ESHO quality assurance can paid by the health insurance in Germany

190
Patient Impression at Prince Hashim Bin Al-Hussein Military Hospital Radiology Department in Zarqa

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Objectives: patients are the main beneficiaries of the services and care that royal medical services hospitals provide. This study examined patient impression were satisfied with the extent to which patients in Prince Hashim Bin Al Hussein hospital ,with imaging services received in the radiology department .This was part of the baseline study that sought to determine the level of performance their through a wide-ranging reform and restructuring renovations have been carried out.
Methods: Interviews were the main method of research used to determine patient impression. Interviews were conducted with clinic tomography, general imaging, clinic magnetic resonance imaging and ultrasound.
Results: The study found that most patients were satisfied with the services and care they received. This should be a high level of impression with viewed in the context of a hierarchical management system to provide care clinics, with the hospital administration at the peak. Health care services and hospital management provides,also expressed some of the errors With specific aspects of services received. Not satisfied, especially as it is with the length of waiting periods before getting the result as compact disc or reports, Poor levels of hygiene in the radiology department tables, and negative attitudes of the staff's Patients.
Conclusion: Although only a small proportion of patients expressed dissatisfaction with these aspects of the services they provide, they are Important in that it is a call to action by the hospital administration to encourage workers to embrace the rays and the development of new crew Spirit of the relationship, which is seen as the patient is the beneficiary of any point.

191
Folic Acid Treatment of Hyperhomocysteinemia in Dialysis Patients

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Objectives: Higher circulating levels of homocysteine are associated with increased risks of vascular diseases, including cerebrovascular disease and peripheral arterial disease as well as other complications of atherosclerosis is the usual cause of death in patients with chronic renal failure. Hyperhomocysteinemia is a well-recognized risk factor for accelerated atherosclerosis in hemodialysis patients. We measured fasting total plasma homocysteine (Hcy) in sixteen chronic hemodialysis patients, Folic acid (5 mg/d), were administered for six weeks in Eleven patients receiving dialysis, and the other patients were left as control group. The Eleven patients on treatment with (5 mg) FA daily displayed simultaneous, statistically significant reduction in the concentration of homocysteine (23. 0± 5.2 umol/L), than the controls (34.5 ±6.2 umol/L). The plasma (FA) concentrations in these groups were (59.0±15.7) and (19.0±4.0) nmol/1, respectively; further studies on the optimal treatment of hyperhomocysteinemia in chronic dialysis patients are needed. And we examined the effect of folic acid (FA) administration on the Hey of the dialysis patients.
Methods: The study group included 16 patients (11 male and 5 female) with CRF;

their ages ranged from 20 to 57 years, who were undergoing dialysis at the dialysis unit of Zaid Bin Al-Hussein Hospital in Jordan (2004/2005). Their plasma (Hcy) was measured post-dialysis after an overnight fast, and 11 patients were then treated with Folic acid (FA), 5 mg daily for 6 weeks, plasma (FA) concentrations were measured before treatment and after 6 weeks of follow-up. For Hcy measurements, venous blood samples were taken in EDTA-containing tubes that were immediately stored in ice. Plasma was separated within 30 min and stored at - 20°C until analyzed. Hey was measured by Abbott IMx homocysteine assay (normal Hey values in the fasting state at our laboratory, 5-12 umol/L). Plasma Folate was determined by using the Abbott Mix microparticle enzyme immunoassay (data obtained were analyzed by using Mann-Withney U Test on SPSS program). The normal range of plasma (FA) was (3.4 - 38.3 nmol/1). Mean within run and between-run precision were determined to be 1.36% CV, detection limit was found to be linear up to 200). Mol/L for homocysteine.

Results: Fasting total plasma homocysteine (Hcy) was markedly increased about 3.2 fold above normal in patients requiring chronic dialysis, but after supplementation with FA homocysteine show no significant difference in control patients, while As shown in table (1) (Hcy) level, of patients' group after supplementation with (FA) led to a significant decreases (39.7%), ($p<0.001$), On the other hand no significant difference in total cholesterol, HDL and LDL cholesterol, triglyceride, urea, creatinine, and uric acid concentrations before or after supplementation with (FA).

Conclusion: Hyperhomocysteinemia is common in renal failure patients. The results suggest that (FA) supplementation has an effect on risk factors of atherosclerosis in patients with renal failure and that interactions may exist between homocysteine and (FA). Supplementation of the diet with (FA), at levels above the current recommended dietary allowances, reduces elevated homocysteine levels. Therefore the current level of folic acid fortification of foods is insufficient to reduce plasma homocysteine levels significantly in (CRF) patients. Such a reduction could be achieved with a supplemental folic acid intake five to six times the current fortification level.

192
A Case Study on Multi Criterion Classification of Medical Devices at Prince Hamzeh Hospital

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Objectives: In a hospital, the level of maintenance provided to individual device is directly related to the availability that is expected from it. Since resources are limited, it is necessary to determine how they should be distributed, so that no important device remains neglected while more resources are concentrated on the most critical items. Therefore, it is necessary to classify devices in an objective way according to its importance.

Methods: The method of multi criterion classification of critical devices, which is described in the present work, allows systematic and detailed quantification and evaluation of the importance of the criticality of all devices. To provide this information, the consequences for a hospital of any failure in the device concerned are analyzed. Finally, a real case example of a Prince Hamzeh Hospital is described, in which the multi criterion classification method was applied.

Results: It was found that the highest percentage of the maintenance Procedure for the medical devices was (24%) for preventive basic maintenance, that is to say, only periodic greasing, cleaning and replacement of consumable components. It also was for corrective maintenance actions were contemplated, that is to say, once the failure occurs. The lowest percentage of the maintenance Procedure for the medical devices was (10%) for devices to be monitored.

Conclusion: The Multi criterion Classification of Critical Devices MCCD method provided a percentage value for all devices, called IC, as a representative of its criticality. This index was calculated as a pondered function of multiple factors, each of which constitutes a different criterion for analyzing the importance that all devices had for the hospital. The IC allowed the device to be classified according to its importance for the hospital and constitutes, therefore, a basic reference value that, together with other technical and strategic factors, helped deciding which level of maintenance should be applied to the device and how the maintenance resources must be distributed.

193
The frequency of Acute Lymphoblastic Leukemia with Aberrant Myeloid Antigen Expression using Flow Cytometry: Experience at Princess Iman Research and Laboratory Sciences Center

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Objectives: To determine the frequency of acute lymphoblastic leukemia (ALL) co expressing myeloid markers using flow cytometry.
Methods: Retrospective review of 167 flow cytometry reports (101males,66 females with M:F ratio 1.5:1, age ranged from 1year to 58years) with the diagnosis of de novo acute lymphoblastic leukemia(ALL), during the period between January 2008 and January 2011, at Princess Iman Research and Laboratory Sciences Center, using two color flow cytometry
Results: 79.6% of all cases express pan B-cell antigen (CD22,cytCD79a, CD19) and were diagnosed as precursor B-cell acute lymphoblastic leukemia (p B-ALL). CD10/CD19 double expression in 114 (85.7%) of 133 cases of pB-ALL but 19 (14.3%) of them lack expression of CD10. On the other hand all cases of precursor T-cell acute lymphoblastic leukemia (pT-ALL) were expressing cytCD3 (34/34), CD5 (13/13) and CD7 (26/26). Myeloid antigen expression was found on leukemic cells in 20 (11.9%) cases; 9.6% of them in pB-ALL and 2.3% in pT-ALL. The most common myeloid antigens expressed were CD13, CD33, and CD117 with frequency of 2.4%, 8.4%, 1.1% respectively. 2.3% of pB-ALL express CD13 compared with 2.9% in pT-ALL ,while CD33 expression was found in 9% in pB-ALL versus 6% in pT-ALL , CD117 was expressed only in one case of pB-ALL and one case of pT-ALL.
Conclusion: This study demonstrates myeloid antigen expression on leukemic lymphoblasts in 11.9% of all cases being more common in pB-ALL as compared to pT-ALL. CD33 is the most common lineage associated myeloid marker found in acute lymphoblastic leukemia cases expressed singly or in combination with other lineage associated myeloid markers.

194
The Advantages and Disadvantages for Oxygen Liquid Tank & PSA Pressure Swing Adsorption Systems

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Objectives: The aim of this study was to identify the advantages and disadvantages of the tow systems uses, to get Oxygen in the case of liquid and gasses.
Methods: A study was conducted in two hospitals at RMS; we monitored O2 gas supply system at prince Ali Hospital (PSA system) for six months, and compare it with O2 gas supply system at Queen Alia Heart Institute (O2 Liquid Tank). We asked the operators of both systems about different aspects by using a special form to collect data.
Results: The results of the study have shown many negative aspects in the use of Oxygen generators, including the difficulty of maintenance of generator at any time due to the need for engineers and technicians on the sufficient experience in maintenance the Oxygen generator, the difficulty of obtaining spare parts required, that is affects of the Oxygen purity, in case of power cuts, it is difficult

to operate the generator through the main generator, there are difficulties appear when we provide O2 cylinders of are the main alternative to a generator of Oxygen, either in the case of exposing the region to environmental pollution, regardless of its format or harmful, such as a fire or chemical warfare, Vann generator is designed to deal with Helium, Nitrogen, and not designed to deal with gas and master carbon.

Conclusion: This study has shown that, the use of liquid Oxygen system tank was more efficient in comparison with the Oxygen generators.

195
Does the Children's Temperature Measurement Vary according to the Type of Thermometer Device used or the Position in which the Probe of the Digital Thermometer is Placed?

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Objectives: To investigate the difference between temperature readings of traditional mercurial thermometers and digital thermometers (vertical and horizontal position) in children.

Methods: Temperature readings of a random sample of 108 children of both sexes aged between one year and ten years visiting Queen Rania Hospital for Children for treatment during the month of April 2012. The children's temperature was measured by three methods: using a mercury thermometer, a digital thermometer with horizontal positioning at first and using the same digital thermometer with vertical positioning. Data for all three types of measurements was then entered and processed by SPSS software. The mean temperature of the respondents based on the three methods was: 36.75, 36.75 and 36.71 respectively.

Results: Analysis of variance (ANOVA) was also employed to test the main question in the research paper. The findings show that the difference in temperature measured by the three devices or methods was not statistically significant, i.e. the null hypothesis of no difference is accepted.

Conclusion: The children's temperature measurement does not vary according to the type of thermometer device used or the position in which the probe of the digital thermometer is placed.

196
The Outcomes of wheelchair Description and Seating for Spinal Cord Injury Patients at Royal Rehabilitation Center: A Preliminary Report

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Objectives: This study was conducted to identify the outcomes of the wheelchair prescription process for spinal cord injury patients at Royal Rehabilitation Center (RRC).

Methods: Fifty eight spinal cord injured patients, 40 males (age range 18 to 50 yrs, M=31 + 8. yrs) and 18 females (age range 20 to 46 yrs, M=28.05 + 7.97 yrs) were involved in the study description for individualize was used to get the required information. An individualized description was created to meet each patient's specific needs and goals. The seating assessment which was part of the assessment process done by therapist during certain time, all of them used to identify the wheelchair comfort, postural control, pressure control, and the stability of the chair user.

Results: Results showed that 69% of our patients have comfort with the seating, while 85% of them achieved full stability of the chair, also55% of our patients have good postural control, while 21% our patients have problem with pressure control according to the seating.

Conclusion: This study showed that around 31% of spinal cord patient had discomfort with wheelchair seating also

45% of the patients have bad postural control, the discomfort and bad posture lead to many serious problems such as pressure ulcers, ,musculoskeletal disorder, (scoliosis, decrease range of motion ,…) which lead to decrease the level of function performance .The main reason of discomfort and bad postural control is due to the measurement of the wheelchair which used has not too match varieties and the specific measurement cannot offers due to the lack of manufactories which use for individualize seating measurement in Jordan.

197
Comparison between Creatine Kinase-MB (CK-MB) and Cardiac Troponin I (cTnI) to diagnose Acute Myocardial Infarction (AMI) in Coronary Care Unit (CCU) at Queen Alia Heart Institute (QAHI)

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Objectives: To compare between Creatine kinase-MB and cardiac troponin I in the early diagnosis of Acute myocardial infarction.
Methods: Prospective observational study. convenience samples of (86) patients were selected during the period of study (March - 2012) in CCU department in QAHI, complaint of chest pain were clinically examined and evaluated by measuring CK-MB in blood serum and cTnI. Serum CK-MB levels were quantitated by the fully auto-mated random access chemistry analyzer (Hitachi 902); on the other hand cTnI was detected in blood samples by the rapid assay (Single step membrane based qualitative immunochromatography).
Results: In this study, 71% of patients of AMI had elevated levels of CK-MB while only32% showed positive cTnI. Also, CK-MB was found to be elevated in 28% of patients within 6 hours and in 37% within 12 hours, whereas, cTnI was positive in only 15% and 21% within 6 hours and 12 hours respectively.
Conclusion: According to this study, CK-MB appears to be more sensitive marker and better indicator for diagnosis of AMI as compared to cTnI especially within the early hours of AMI.

198
Evaluation Between Hot Wire and Differential Pressure Flow Sensors in ICU Ventilators at King Hussein Medical Center

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Objectives: The aims of this study is to determine the most economic use and accuracy between (Hot wire and Differential pressure) flow sensors of the ICU Ventilators.
Methods: This study was performed on ICU ventilators at King Hussein Hospital in ICU Department, two types of flow sensors were used, Differential pressure from A Company 6 equipments and Hot wire from B Company 6 equipments. All maintenance records since 1/2009-5/2012 in biomedical workshop were reviewed; we calculate the flow sensors average life time. We measured the tidal volume output and other parameters of ventilation weekly for each (3 months 2/2012-5/2012) at the same setting parameters and at the same circumstances by using flow analyzer from TSI certifier company.
Results: After measurement it found the following results: Flow Sensors type, Average Tidal volume(at 500ml),Average output pressure(at 20 mbar),accuracy% Hot wire 491ml 19.6 mbar 98% Differential pressure 476ml 19.1mbar 95%If we divide the price on the average life time of each flow sensor Flow sensor type, Average Life Time (Hours), Price of each flow sensor, Coast of operating hour(JD) Hot wire

6845 540JD 0.078 Differential pressure 135 20JD 0.148

Conclusion: The accuracy of Hot wire flow sensor is better than Differential pressure flow sensor. Hot wire flow sensor is more economic than Differential pressure flow sensor regarding the cost of operating hours. We recommend the use of hot wire flow sensor technique in the future more widely.

Hall J Session 1
Dentistry: Orthodontics, Pedodontics, Periodontics, Conservative Dentistry

199
Mean Age and Chief Complaint of Jordanian Children on their First Dental Visit

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Objectives: To investigate the mean age and the most common chief complaints of Jordanian children at which they report on their first dental visit.

Methods: The study population consisted of a total of 81 patients with mean age of 61.84 + 24.38 months referred to the Pedodontics Clinics in both Princess Haya as well as King Hussein Medical Center Hospitals. Thirty-nine patients were males with a mean age of 60.64+26.24 months and 42 were female patients with a mean age of 62.95+22.79 months. An informed consent and patient information sheet were given to the parents to fill prior to dental examination. Patients' date of birth, gender, brushing habits and chief complaint were recorded. Using a dental explorer and mirror and clear illumination, the mouth was examined thoroughly and carious teeth were recorded. Reasons for attendance and brushing habits were recorded.

Results: The difference in mean age between both groups was statistically insignificant. Most common chief complaint for the visit was pain (34%), second most common complaint being dental caries (24%). Fifty three percent of all subjects irregularly brushed their teeth while 27% regularly brushed, and the remainder (16%) never brushed their teeth. No correlation was found between brushing habits and number of carious teeth (P>0.05). Seventy five percent of subjects had 4 or more carious teeth.

Conclusion: This study suggests that the awareness level regarding the importance of the first dental visit was very low in the Jordanian population.

200
Frequency of Primary Tooth Injury at Prince Rashid Bin Al-Hassan Military Hospital

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Objectives: To determine the frequency of primary tooth injuries in relation to age, sex, cause, types of dental injuries, number of injured teeth, and lag time between trauma and presentation at Prince Rashid hospital.

Methods: Chart review of 40 patients with trauma to 66 primary teeth was carried out retrospectively over a period of 2 years between May 2010 and May 2012 at Prince Rashid Military Hospital in Irbid. Extracted data included age, sex, cause of injury, type of injury according to Andreasen classification, number of injured teeth, and lag time between trauma and presentation.

Results: Out of 1322 patients with dental trauma, 40 (3%) patients were diagnosed as primary teeth injury.

Out of these 40 patients, 22 (55%) were males and 18 (45%) were females. At time of presentation age ranged from 0.83-11.00 years with a mean of 4.41 ± 2.58 SD years. In 95% of patients, falling down was the most common cause of injury.

The 3-6 years age group was the most frequently affected group in males (25%). Class 9 (intrusive luxation) was the most common type of injury (36.4%), followed by class 8 (subluxation) 24.2%. Maxillary central incisor was the tooth most frequently affected (68.2%). Most of the patients had one tooth injured (57.5%). About one third of patients presented at the same day of trauma while 4 patients (10%) presented after one year.

Conclusion: Despite the low frequency of primary teeth injury at Prince Rashid Hospital, proper diagnosis and immediate management is of paramount importance to prevent serious long term sequelae.

201
Patients' Attitude toward Using Gloves by General Dental Practitioners

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Objectives: To evaluate the awareness of patients toward wearing gloves by general dental practitioners during treatment at Queen Alia Military Hospital.

Methods: Two hundred and seven patients, 73 males and 134 females with a mean age of 20.6±10.1 years, attending the dental clinics at Queen Alia Military Hospital in Amman/Jordan participated in this study.

A questionnaire designed to elucidate patients' attitudes towards wearing gloves by the general dental practitioners was utilized, and completed by patients during the time of dental appointments.

Results: While one hundred and ninety nine patients (96.1%) considered the routine wearing of gloves by dentists a must, 170 patients (82.1%) did not attend the clinics of general dental practitioners not wearing gloves during dental treatment and 37(17.9%) of patients were indifferent.190 patients (91.8%) considered wearing gloves protective for both dentist and patients. A total of 179 patients (86.5%) believed that dentists should change gloves in between patients and only 7 patients (3.4%) thought it was enough to wash gloves between patients during dental treatment.

Conclusion: The majority of patients demonstrated strong awareness toward using gloves by general dental practitioners during dental treatment. While a small percentage of patients attended general dental practitioners clinics despite the fact that dentists did not wear gloves during treatment.

202
The Awareness of Parents of the Time of Eruption of Permanent First Molar and the Prevalence of Caries in this Tooth

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Objectives: To evaluate parents' awareness with regards to the time of eruption of permanent first molars in their children's mouths and to assess the prevalence of dental caries in this tooth.

Methods: The study consisted of one hundred and fifty children, 5-11 years old with a mean age of 7.6 years, attending the Pediatric Clinic of Princess Haya Hospital /Aqaba. Each child had at least one permanent first molar erupted with a total of 410 erupted permanent first molars. The 410 teeth were clinically examined for the presence of carious lesions. Parents were interviewed and asked about their opinion with regards to the time of its eruption.

Results: Among the 410 permanent first molar examined, 85 (21%) were clinically carious. 70 teeth (17%) were previously filled. 25 (6%) were previously extracted due to caries. 230 (56%) were clinically sound. Among the 150 parents interviewed, 27 (18%) believed permanent first molars erupt at around the age of six years. The remaining 123 parents (82%) either didn't know or assumed that this tooth erupts at or after the age of ten years.

Conclusion: Most parents are not aware of the time of eruption of permanent first molars, a significant tooth both in occlusion and mastication. This lack of awareness may lead to early carious

attack and even early loss of this tooth. Thus oral health education should be implemented and emphasized.

203
Oral Health Knowledge, Attitudes and Behavior of Nursing Students at Mutah University

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Objectives: To describe the oral health knowledge, attitudes and behavior of nursing students at Mutah
University, considering them a representative sample of the Jordanian adult population at large.
Methods: Five hundred and twenty students were invited to participate in this study which was conducted during the second semester of the academic year (2011-2012) using an Arabic modified version of the Ling Zhu questionnaire.
Results: Out of the 520 students, only 503 completed the questionnaire. More than half of the students (61%) brushed their teeth at least twice daily. 37.6% brushed only after meals with half of them spending more than a minute brushing. Fluoridated toothpaste and vertical brushing technique were found to be the most preferred whereas the hard-bristle tooth brushes were the least preferred. 12.4 % of the students kept their tooth brushes for more than 6 months. Having bright teeth was found to be the leading motive to brush teeth in 53.1% of students.60.4% of students not brushing their teeth reported having insufficient time as the main reason.12.9% of the students never visited a dentist. 21.3% had their last visit at least 3 years ago. Answers were insignificant regarding gum bleeding with brushing. The majority of students reported drinking coffee or tea as well as sweets once daily
Conclusion: Despite that oral health knowledge, attitudes and behavior among Jordanian population has improved, more educational and preventive programs targeting children as well as adults are required to reach better levels.

204
Prevalence of Tongue Coating in Dental Clinics at the Royal Medical Services

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Objectives: To investigate the status and prevalence of tongue coating and its relation to age, gender, smoking, systemic disease as well as oral hygiene habits, using The Winkel Tongue Coating Index.
Methods: A total of 353 subjects (187 females, 166 males) were included in this study. A pre-designed structured questionnaire was used to record details on age, gender, smoking, medical background and oral hygiene habits. Clinical examination was performed in the dental clinic with a plain mouth mirror and probe under artificial light. After drying the tongue with gauze and air spray, the status of tongue coating was assessed using The Winkel Tongue Coating Index.
Results: Of the 353 patients included in this study, 77 subjects were detected as having tongue coating with a prevalence of 21.8%. The Winkel Tongue Coating Index mean was 6.77. A strong correlation was found between tongue coating and increasing age and it was significantly higher in males as compared to females. In addition, a strong association was found between tongue coating and smoking, Diabetes Mellitus as well as poor oral hygiene. Tongue coating was also strongly related to subjects' oral hygiene habits such as tongue brushing and the use of mouth wash.
Conclusion: Tongue coating is strongly correlated to age, sex, Diabetes Mellitus, smoking and poor oral hygiene.
Both, regular use of mouth wash as well as regular tongue brushing improve tongue hygiene and decrease the probability of tongue coating.

205
Oral Hygiene and Oral Health Knowledge among 12-15 Year-Old School children in Al-Karak - Jordan

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Objectives: To evaluate oral hygiene and gingival status among 12-15 year old schoolchildren in Al karak governorate/ Southern Jordan.
Methods: A cross sectional study was conducted among 730 pupils in the 12-15 year old age group.
Of those, 263 (36%) were males and 467 (64%) females in their Sixth, Seventh, Eighth as well as Ninth grades. All participants were examined for oral hygiene and gingival condition, using the Silness and Löe Plaque Index (PI), and the Löe and Silness Gingival Index (GI).
Results: The mean Plaque Index for the total study group was 1.33. For males, the mean Plaque Index was 1.38 while for females it was 1.30. The difference was statistically non-significant, (p=0.126). The mean Gingival Index for the total study group was 1.40. While males scored1.55 mean Gingival Index, females scored 1.32. The difference was statistically significant (p<0.001).
Conclusion: This study proved that oral health awareness level among public schoolchildren in Jordan is still poor and needs to be improved. A long-term school-based oral health education program is highly recommended.

206
Differences in Mandibular Parameters among Dentate Subjects using Digital Panoramic Radiography

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Objectives: To investigate the influence of age and gender differences in the gonial angle, ramus height and
bigonial width among Jordanian dentate subjects using digital panoramic radiography.
Methods: A total of 209 (103 males and 106 females) dentate subjects aged between 11 and 69 with a mean age of 33.51±14.50 years participated in this study. The data were obtained through an interview in addition to clinical and radiographic examination. Gonial angles, ramus heights (on both sides) and bigonial widths were recorded using panoramic radiography and measured digitally for each subject. The mean values were calculated and compared between male and female subjects and between different age groups using SPSS (V. 17). Level of significance was set at 0.05.
Results: Males have higher values of the parameters when compared to females; the differences in bigonial width and ramus height were statistically significant (p<0.0001). Gonial angles and bigonial widths increased with increasing age, however, ramus height increased from 11≤29 years then decreased with increasing age.
Conclusion: The morphology of the mandible changes as a consequence of age and gender, which is expressed as a widening of the gonial angle, increase of the bigonial width and shortening of the ramus.

207
Orthodontic Management of the Medically Compromised Patient

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Objectives: The prevalence of patients with underlying medical conditions seeking orthodontic care has increased over the past two decades. A pilot study performed in 2002 on patients of several orthodontic practices revealed that more than 25% of patients seeking orthodontic therapy were diagnosed with certain medical conditions that potentially impacted their care.
Methods: This paper reviews the latest literature related to each of the relevant disorders and the challenges they present, the potential impact of the disorder, and suggestions for successful clinical interventions.
Results: Obstacles that may preclude the delivery of orthodontic treatment has been overcome by proper clinical guidelines.
Conclusion: Major changes in the updated recommendations are made for appropriate management of medically compromised patients.

208
Prevalence of New Carious Lesions in Patients Undergoing Orthodontic Treatment with Fixed Appliances

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Objectives: The aim of this study is to evaluate the effect of cemented orthodontic bands on the development of new carious lesions on molar teeth in patients undergoing orthodontic treatment.
Methods: A group of patients undergoing orthodontic treatment with fixed appliances in the hospitals of The Royal Medical Services were randomly selected. Exclusion criteria were previous restorations on band cemented molars. Patients were classified into three groups according to the duration of orthodontic treatment. Cemented bands on molars were removed by an orthodontist, followed by cleaning of cement residues with hand instruments and rubber cups. The teeth were then examined visually for the presence of caries by a Specialist in Conservative Dentistry. The degree of caries if present and its distribution was assessed and recorded in specially designed tables.
Results Seventy percent of examined patients had at least one new carious lesion involving at least one surface of the examined teeth. The prevalence of new carious defects and the degree of caries had a direct relationship with the duration of band insertion.
Conclusion Applying fixed orthodontic appliances is a risk factor increasing the possibility of caries formation. The preventive measures provided seem to be ineffective. Significant attention from both patients and orthodontists should be considered.

209
Success Rate of Inferior Alveolar Nerve Block Analgesia

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Objectives: To evaluate the success rate of inferior alveolar nerve block (IDB) analgesia and to compare the anesthetic effect of 4% Articaine and 2% Lidocaine (both with 1:100,000 epinephrine) on the success rate of inferior alveolar nerve block (IDB) analgesia.
Methods: Six hundred patients with an age range of 15-80 years were treated by six experienced dentists of different specialties. Patients required various dental treatments in the right and left sides of the lower jaw. Two types of dental analgesia; 4% Articaine and 2% Lidocaine were administered via the inferior alveolar nerve block technique prior to treatment.
Results: The success rate of inferior alveolar nerve block was found to be 93.66%. Both, the practitioner administering the anesthesia in addition to the type of local anesthesia used (96.3% with 4% Articaine compared to 91% with 2% Lidocaine)

have an effect on the success rate of IDB
Conclusion: The experience of the dentist as well as the type of local anesthesia used both have an effect on the success rate of inferior alveolar nerve block.

210
Dental Anxiety and its Possible Effects on Caries Prevalence among Jordanian Adults

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Objectives: To evaluate the prevalence of dental anxiety and to assess its relationship with caries prevalence among Jordanian adults.
Methods: This is a cross sectional study consisting of 500 adult dentate patients, (265 males, 235 females) of age range from19-55 year attending the diagnostic dental clinic at Princess Aisha Medical Complex in the period from November 2010 to January 2011. Data was collected using a questionnaire based on the Modified Dental Anxiety Scale. Patients were examined for dental caries prevalence using the Decayed, Missing and Filled Teeth (DMFT) Index, according to World Health Organization guidelines.
Results: Only 44 patients (8.8%) had high dental anxiety scores (≤9, Modified Dental Anxiety Scale), while the remaining individuals (91.2%) showed moderate to low dental anxiety (≤8, Modified Dental Anxiety Scale).The mean Dental Anxiety score for males was 9.78 and for females 11.55, with a statistically significant difference between both genders (p-value <0.001, t- test). The most fearful stimulus in the dental clinic for both genders was the needle injection, followed by tooth drilling. Individuals with high dental anxiety had a mean decayed value of 3.16 while individuals with low dental anxiety had a mean decayed value of 2.05. A statistically significant difference between both groups (p-value = 0.001, ANOVA test) was noticed.
Conclusion: Dental anxiety remains a significant problem for many patients of both genders and for different age groups among Jordanian adults. Dental anxiety had negative effect on oral health status by increasing the prevalence of decayed teeth.

Hall J Session 2
Dentistry: Maxillo-Facial Syrgery, Prosthodontics

211
Sinus Lift: Our Experience at King Hussein Medical Center

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Objectives: To discuss various techniques of the sinus lift surgical procedure, and to focus on the advantages and disadvantages of each.
Methods: Presentation of a number of cases performed by different technique, compare the techniques according to criteria such as time consumed for each procedure, ease of performance, and complications.
Results: Although it consumes more time, the classical sinus lift technique provides better results, is more easily performed and offers better access.
Conclusion: Sinus lift provides a solution for patients seeking implants in case of resorbed maxillary posterior alveolar ridges. Different techniques are advocated, however, the classical technique remains the best.

212
Photodynamic Therapy: The Broad Spectrum Killer

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Objectives: Photodynamic therapy (PDT) is an anticancer treatment modality utilizing the generation of singlet oxygen and other reactive oxygen species through visible light irradiation of a photosensitive dye (photosensitizer) accumulated in the cancerous tissue. Upon exposure of cancer cells to the photodynamic stress, multiple signaling cascades are concomitantly activated and depending on the subcellular

location of the generated reactive oxygen species (ROS) and the intensity of the oxidative damage, they dictate whether cells will cope with the stress and survive or succumb and die. Different methodologies have been developed to allow the discrimination of cell death subroutines at the morphological, ultrastructural, and biochemical levels. Photodynamic therapy is also a promising treatment against different microbes (a PDT), the antimicrobial effect of PDT is similar to that against cancerous cells. The introduction of PDT for the management of various head and neck cancers as well as some oral infections is becoming more and more common with time We aim to provide a solid knowledge about the current practice of PDT in the management of oral as well as other head and neck neoplasias and infections

Methods: By reviewing the current literature and book chapters related to the subject of PDT and exploring updated techniques of this treatment modality.

Conclusion: Photodynamic therapy is a promising non invasive treatment modality for the management of various oral and head and neck dysplastic lesions and infections. More research and advances are still needed to expand the range of lesions treated.

213
The Prevalence of Carotid Artery Calcification on the Panoramic Radiographs in Jordanian Population

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Objectives: To determine the prevalence of carotid artery calcification as detected on panoramic dental radiographs in a sample of Jordanian patients.

Methods: This cross sectional study was conducted at The Dental Department of King Hussein Medical Center in the period from September 2011 to May 2012. One hundred thirty eight panoramic radiographs of Jordanian patients aged 40 years and above were collected from the patients' charts. Statistical analysis included Chi-square test and Fisher's exact test.

Results: Carotid artery calcification was noted in 17 (9.29 %) of the 183 radiographs in patients with an age range of 48-74 years (mean=64 years). Among these images, 12 were obtained from males (6.55%) and 5 from females (2.73%). The CAC were significantly more common in men than in women (P =0.002). There were 4 subjects (2.18 %) with bilateral calcifications and 13 subjects (7.29%) with unilateral calcification. No significant difference was found between the right and left sides (P=44). Of those in the positive group, 11 subjects (64.7%) suffered from Hyperlipidemia, 13 subjects (76.47%) from Hypertension, 9 subjects (52.94%) from Diabetes Mellitus, and 10 subjects (58.82%) presented with a history of smoking.

Conclusion: Panoramic radiographs should be evaluated not only for pathosis of the teeth and jaws, but also for other incidental findings, especially in the soft-tissue region of the neck. Thus, Carotid calcifications identified on panoramic radiographs not only are powerful markers for subsequent vascular events but in addition provide potentially life-saving information especially for elderly people at risk for stroke.

214
Prevalence of Torus Palatinus and Torus Mandibularis in Jordanian Population

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Objectives: To determine the prevalence of torus palatinus and torus mandibularis in relation to age and gender in patients attending Queen Alia Military Hospital.

Methods: A total of 1218 subjects attending the dental department of Queen Alia Military Hospital from the 1st of January to 31st of March 2010 were examined for the presence of torus palatinus and torus mandibularis. The presence of tori was confirmed by clinical examination and palpation. Subjects were divided into 6 age groups.

Results: The age of patients presenting with tori ranged from 16 to 69 years, majority of which (30%) were in the age group of 21≤30 years. The age of male patients ranged from16 to 65 years

while that of females ranged from 18 to 69 years. The prevalence of tori in the individual age groups ranged from 8.4% in the group of 11≤20 years to 44% in group of 31≤40 years. Torus palatinus and torus mandibularis were significantly more prevalent in females than in males (39% and 20% respectively).The overall prevalence was 28.7%.

Conclusion: Significant relationship exists between the occurrence of tori and gender which confirms the fact that etiological factors of tori are multifactorial namely genetic and environmental.

215
Facial Trauma: Our Experience at Princess Haya Al-Hussein Military Hospital in Aqaba

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Objectives: To provide a review of challenging cases of facial trauma encountered at Princess Haya Military Hospital.

Methods: Retrospective review of 20 challenging maxillofacial trauma cases during the year 2011- 2012. The review included first presentation, cause of trauma, treatment options, and surgical approach. Photographic documentation of pre-and post-operative results is also provided.

Results: Traumatology is one of the most common aspects of Maxillofacial Surgery encountered at Princess Haya Military Hospital, being a referral center for the South of the Kingdom. We were able to deal with cases of severe facial trauma and provide excellent surgical care for the patients.

Conclusion: Princess Haya Military Hospital is an important referral center for all medical and surgical cases in the South of the kingdom.

216
Prophylactic Immediate Packing with Solcoseryl Dental Adhesive Paste for the Prevention of Alveolar Osteitis

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Objectives: To evaluate the effect of placement of a packing medicated with Solcoseryl Dental Adhesive Paste, within the surgical extraction site as a prophylactic measure for the prevention of the development of Alveolar Osteitis.

Methods: One hundred and ten patients undergoing surgical extraction for their impacted lower third molars were included in this study. Patients were randomly allocated in two groups; in the first group (n=56), the extraction sockets were packed to the crest of the alveolar ridge with a 3cm length filament gauze impregnated with Solcoseryl Dental Adhesive Paste, while in the second (control) group (n=54), no packing was placed inside the extraction sockets.

Results: The overall average rate of Alveolar Osteitis was 19% (21 patients out of 110), with an incidence of 11% in packed surgical sites and 28% in non-packed sites.

Conclusion: Immediate packing of extraction sites with Solcoseryl-containing pack is highly beneficial in preventing the development of Alveolar Osteitis

217
The Accuracy of Fine Needle Aspiration Cytology in the Diagnosis of Neck Masses other than Thyroid

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Objectives: To evaluate the efficacy of fine needle aspiration cytology (FNAC) in diagnosing neck masses.

Methods: One hundred and nineteen FNAC's were performed over an 8-year period between 2004 and 2011 as requested by an oral & and maxillofacial surgeon in Prince Rashid hospital. The

reports of the FNAC's were reviewed and compared with the final diagnosis. The final diagnosis was determined either by the histopathological examination of the lesion or the clinical outcome.

Results: Of the 119 FNAC's performed, 13 were non diagnostic and in 27, the final diagnosis couldn't be reached. After exclusion of those cases, 79 FNAC's were compared with the final diagnosis. A cytological diagnosis of malignancy was confirmed in 9 cases out of 10 (sensitivity 90%). Cytological diagnosis of benign tumor was confirmed in 17 out of 24 (sensitivity 71%). Inflammatory and other non-neoplastic lesions had a concordance in 43 out of 45 cases (sensitivity 96%).
Cytological diagnosis of benign salivary gland tumor was confirmed in only 7 out of 19 cases (sensitivity 37%). Cytological diagnosis of lymphoma was confirmed in 3 out of 4 cases (sensitivity 75%). All the 5 metastatic carcinomas were accurately identified by FNAC. Seven cases of salivary gland malignancies were misdiagnosed as benign tumors. One lymphoma case was misdiagnosed as reactive.

Conclusion: While FNAC was reliably accurate in detecting metastatic carcinomas to neck lymph nodes, it was unfortunately unreliable in distinguishing between benign and primary malignancies of the major salivary glands. Another pitfall of FNAC was in distinguishing between lymphoma and reactive lymphadenitis.

218
Mandibular Overdenture Supported by Two Implants. A Prospective Comparative Preliminary Study: One Year Results

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Objectives: To evaluate the condition of the supporting and peri-implant tissues after construction of mandibular implant-supported dentures opposing conventional maxillary dentures. The comparative assessment of patient satisfaction and preference was also considered.

Methods: Twenty edentulous elderly patients (Cawood class V–VI) participated in this cross sectional experimental design, prospective clinical study between 2008 and 2012. All the subjects were over 65 years of age. Conventional dentures were fabricated for all participants using the standard method and were allowed to use them for one year. After data collection, two implants were placed bilaterally in the canine region of the mandible using one surgical technique. After 3 months, overdentures were fabricated supported by two locator denture housing attachments. A standardized clinical and radiographic evaluation was performed 1-week, 0, 6 and 12 months after insertion of the conventional and implant supported dentures. Intra-oral radiographs were made. Patient satisfaction was recorded using questionnaires using simple Arabic language. Results were analyzed.

Results: The study indicated statistical superiority of the implant overdenture as compared to the conventional one. The soft tissue response showed a significant improvement with implant supported denture therapy. None of the patients showed any sensory change in lip or chin region. The pocket depth decreased significantly whereas the mucosa recession increased significantly ($P = 0.001$). After 12 months, there was insignificant bone loss around the implant (less than 0.2mm). Patients satisfaction with mandibular implant-supported overdentures was recorded as "great."

Conclusion: From our study it was concluded that implants placed in the inter-foraminal region supply a proper base for the support of mandibular overdentures in the edentulous patient. In addition implant retained overdentures result in a significant increase in patient satisfaction when compared to conventional dentures.

219
Temporo-Mandibular Disorder Features in Complete Denture Patients versus Patients with Natural Teeth: A Comparative Study

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Objectives: To determine the prevalence of Temporo-Mandibular Disorder (TMD) features in completely edentulous patients wearing dentures, and to compare this to the prevalence of TMD features in fully dentate patients.
Methods: A questionnaire and clinical examination were used to assess 473 patients. 182 of these were complete denture wearers attending the Prosthodontic clinic and 291 were fully dentate patients attending the Conservative Clinic for routine restorative dental treatment.
Results: The prevalence of Temporo-Mandibular features in dentate patients (with the exception of crepitus sound of the joint) was significantly greater when compared to patients wearing complete dentures (29.2% and 14.3%, respectively). Dentate patients significantly ($P<0.05$) exhibited more signs of Temporo-Mandibular joint tenderness (12.4%) and clicking (10.7%) on clinical examination compared to 4.4% joint tenderness and 3.3% clicking in denture wearers. However, denture wearers had significantly ($P<0.05$) more signs of crepitus sounds of Temporo-Mandibular Joint compared to dentate patients (9.3% and 2.1%, respectively).
Conclusion: The Temporo-Mandibular Disorder features were twice as prevalent in dentate patients when compared to those wearing complete dentures. Dentate patients exhibited more Temporo-Mandibular Disorder signs when compared with denture-wearers. Temporo. Mandibular Joint tenderness and clicking were significantly found more in dentate patients, however, the latter group suffered from crepitus sounds in the joint.

220
Association between Length of Time of Denture Wearing and the Reduction of Mandibular Residual Ridge in Completely Edentulous Patients Wearing Complete Dentures

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Objectives: To evaluate the association between denture wearing and the reduction of mandibular residual ridge in completely edentulous patients wearing complete dentures and to investigate the effect of gender and age on ridge resorption.
Methods: Forty≤eight patients (24 males, 24 females) wearing complete dentures, with an age range of 55-79 years (mean 68.7 years) were included in this study. Resorption in the mandibular residual ridges was assessed by means of the mental foramen and the inferior border of the mandible on panoramic radiographs, using The Wical and Swoope analysis method. Measurements were carried out using The Fowler Electronic Digital Caliber (resolution ± 0.01mm). The amount of mandibular ridge resorption was calculated and correlated with length of time of edentulousness and denture wearing. Differences in gender and age were compared. Statistical analysis was performed using SPSS (V11.0). Level of significance was set at 0.05.
Results: The mean mandibular residual ridge resorption of all participants was 11.3 mm (19.6%). The above 20 years denture wearers≤group had significantly more resorption ($P<0.01$) compared with the 15≤20 years≤ group (31.5% versus 22.6%); and more resorption ($P<0.05$) compared with the 10≤15 and 5≤10 years≤groups (17.9% and 10.3%), respectively. For the other age groups, the amount of mandibular residual ridge resorption was directly related to the number of years of edentulousness. Females recorded significantly greater amount of resorption ($P<0.001$) compared to males (34.7% versus 23.2%).
Conclusion: Reduced mandibular height is directly related to years of

edentulousness and denture wearing with greater amount of resorption taking place among elderly women.

Hall J Session 3
Nursing

221
Critical Care Outreach - The Benefits

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Objectives: Patient experience and quality of care improved and reduction of adverse clinical events. Empower and enhance clinical staff confidence, give consideration to competence and also the experience within teaching, training and treating the at risk patient. Consider the organisation - the ability to deliver holistic and comprehensive care across all sections, regardless of locations.
Methods:3 Phases to be considered 1. Early recognition and hence management of the sick and deteriorating ward based patient by means of track and trigger systems or early warning scoring systems. 2. Give consideration to how much clinical involvement is on general ward areas - post critical event 3. Consider the follow up and also post hospital discharge
Results: This can result in 1. Shorter length of stays for the sick patient in hospital 2. Reduce the number of adverse clinical events 3. Early detection means early prevention - consider this in all hospital areas 4. Reduce the number of admissions to Critical Care 5. Admit the patient earlier to Intensive Care - possibly requiring a lower level of care. 6. Give consideration to the aspects of/potential re-admissions to Critical Care.
Conclusion: Critical Care Outreach Teams have been developed in response to evidence based research - where patients who were acutely unwell on the ward areas were often not being treated in a timely fashion. Many models exist - and the general concept is to reach out and touch and support the sick and deteriorating ward based patient.

222
Jordanian Women's Lived Experience of Infertility

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Objectives: The ability to reproduce and give birth is an important part of the human beings life; thus, infertility can cause anxiety for the infertile people. In developing societies, woman frequently bears the emotional stigma of a couple's infertility. Therefore, the aim of this study was to explore Jordanian women's lived experience of infertility.
Methods: A qualitative phenomenological approach was used. Data were collected through face-to-face interviews with 30 Jordanian women who experienced infertility. The bio-psychosocial theory of Infertility guided data collection and analysis in this study, with the theory applied to the perception of experience.
Results: Colaizzi's method was used for data interpretation. Eight major themes were identified: the themes presented under interpersonal relation stresses were; missing role of motherhood, experiencing marital challenges, feeling social pressure. The themes reflected the psychological stresses were experiencing depression and disappointment, while the biological stress was having treatment associated difficulties. The women reported their perception of family support, and living with infertility as factors which mediated the infertility experience.
Conclusion: Being infertile significantly influenced the physical, emotional, social, and spiritual health of Jordanian women. Perceived social support and personal coping strategies were used to mediate the infertility effect. Designing and implementing supportive interventions for women who are infertile is essential.

223
Nurses' Ability to Detect and Document Medication Prescribing Errors: A Comparative Study between Accredited and Non-Accredited Hospitals in Jordan

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Objectives: The purpose of this study was to investigate the prevalence of medication prescribing errors in accredited and non-accredited Jordanian hospitals and to explore the nurses' abilities in detecting prescribing medication errors. The study research questions include, investigating the status of medication prescribing errors in the participating hospitals, testing nurses' abilities to detect errors in medication prescriptions, examining the difference between Jordanian accredited and non-accredited hospitals in frequency of medication prescribing errors, exploring the factors that contribute to errors in prescribing medication as perceived by nurses, and exploring how do nurses' perceive medication prescription errors.
Methods: This study used a comparative descriptive design utilizing methodological triangulation, including an audit of patient medical records and focus group interviews. Four hundred medical records from two accredited private hospitals and two private non accredited hospitals in Amman were analyzed. Focus group discussions were used to collect data from 28 nurses to explore the qualitative research questions.
Results: Study findings revealed over 2,034 medication prescriptions. All prescriptions had at least one or more errors. Differences between accredited hospitals and non-accredited hospitals in some elements of the overall medication prescribing errors were found.
Conclusion: The findings of the study showed that medication prescribing errors in Jordan is an important problem that needs further investigation and special attention by all health care team members. In addition, the study findings can be used to develop educational training programs for nurses, pharmacists and physicians focusing on a way to reduce and prevent medication prescribing errors.

224
The Influence of Demographics and Previous Screening Practices on Intention to Perform Mammography among Women in Jordan

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Objectives: To determine the influence of demographics (age, education and marital status) in addition to previous breast screening (Breast Self Exam, Clinical Breast Exam and mammogram) on the intention to perform mammography among women in Jordan.
Methods: A cross sectional descriptive survey design was conducted on a national sample of 636 women who were randomly selected with the assistance of the Jordanian statistics department. A three-stage sampling procedure was employed to provide estimates for the 12 governorates within the three regions of Jordan. First, blocks were selected systematically as primary sampling units (PSUs) with a probability proportional to the size of the PSU. Second, a fixed number of 15 households were selected as final sampling units in each PSU. Finally, random selection of individual interviewee from each household was carried using Kish table procedure. A structured questionnaire with face to face interview was used. Intention to perform mammography in the future was measured by asking women about their intention to perform mammogram in the future even though they were not having symptoms. Responses were measured on a 4 point Likert scale ranging from very likely to very unlikely. The sample was restricted to women who were 40 years and above at the time of survey, which is the recommended age to start screening
Results: Most of the women (n=440, 69%) were willing to perform mammography screening in the future. Further analysis showed that younger (X2= 43.0, df: 2, p= 0.00); less educated (X2= 25.6, df: 2, p= 0.00) and married (X2= 14.6, df: 2, p= 0.00) women were more willing to perform mammography in the future. Women who previously performed breast self-exam (X2=

17.3, df: 1, p= 0.00) were more willing to undergo mammography screening in the future than those who did not. Meanwhile neither those who had CBE performed to them (X2= 2.7, df: 1, p= 0.06) nor those who had a mammography (X2= 2.3, df: 1, p= 0.06) had significantly higher intention to mammography screening in the future.
Conclusion: Although women in Jordan showed positive attitudes toward breast cancer screening, Jordan is still witnessing underutilization of screening services. Reasons prohibiting women from screening should be further explored.

225
Psychological Distress and Perceived Support among Jordanian Parents Living with a Child with Cerebral Palsy: A Cross Sectional Study

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Objectives: The purpose of this study was to provide insight into the psychological distress and perceived support among Jordanian parents living with a child with cerebral palsy.
Methods: In 2010, A cross sectional, descriptive, correlational design was used with a non-probability sample of 204 Jordanian parents. Both mothers and fathers, interviewed individually rather than in pairs, were recruited from health care centres that provided comprehensive care for children with cerebral palsy in Jordan and from designated schools for special education. The Gross Motor Function Classification System (GMFCS), the Perceived Stress Scale (PSS), the Beck Depression Inventory (BDI), the Strengths and Difficulties Questionnaire (SDQ) and the Multidimensional Scale of Perceived Social Support (MSPSS) were administered to parents. Descriptive statistical analysis was applied. Bivariate correlation analysis was undertaken to examine the relationship between variables.
Results: More than 60% of parents often felt nervous and stressed. The mean score on the PSS was 27.0 (SD=9.33) and the mean score on the MSPSS was 58.9 (SD=15.1). Severe disability in the child was associated with high mental distress in the parent and linked to low support from friends. There was a significant negative correlation between parental stress, depression and social support. Parents with the most psychological distress were the least-well supported.
Conclusion: This study has implications for health professionals in terms of developing strategies for reducing parental stress. The findings will inform an intervention study to investigate multi-professional support.

226
The Effect of Mentorship Orientation Program on Teaching Self-Efficacy of New Nurse Faculty

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Objectives: Few studies discussed the application of orientation programs on the new nurse teachers with no documented studies done in Jordan. The aim of this study was to examine the effect of mentorship orientation program on Teaching Self-Efficacy of new nurse faculty in Royal Medical Services Nursing College.
Methods: A pilot study of one group pretest- post test design was conducted over one year during the 2010/2011 semesters. Eight nurses who met the inclusion criteria were recruited. Teaching Self-Efficacy was measured using Self Efficacy Toward Teaching Inventory (SETTI) before, during and after the program. Session group was conducted as an innovative method of mentorship and evaluation.
Results: The study findings showed that the participants' Teaching Self-Efficacy levels were 118.5, 116.4, 104.3 pre, during and post program respectively. Using Freidman nonparametric test, there was statistically significant difference (x2= 12, df=2, p= 0.002) between the means of before, during and after the program total scores of Teaching Self-Efficacy.
Conclusion: Applying mentorship orientation program as a mandate element of preparing the new nurse faculty is needed to make those nurses aware of their teaching self efficacy in order to become more powerful credible teachers. However, we recommend conducting the

study with a larger sample size and in a different setting.

227
Predictors of Dietary and Fluid Non-Adherence in Jordanian Patients with End-Stage Renal Disease Receiving Hemodialysis: A Cross-Sectional Study

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Objectives: The purpose of this study is to provide insight into the relationship between dietary and fluid nonadherence, depressive symptoms, quality of life, perceived barriers and benefits of exercise, and perceived social support among Jordanian patients with end stage renal disease.
Methods: A descriptive, correlational, cross-sectional design was used and 190 Jordanian patients with end stage renal disease receiving hemodialysis from three main Jordanian cities were included. Self-reported questionnaires were employed to measure the key variables.
Results: Patients were more likely males with mean age of 48.2 ±14.9. Only, 27% of the patients showed full-commitment to diet guidelines and 23% to fluid guidelines during the last 14 days. Depression (M = 18.8 ± 11.4) had significant negative association with quality of life (importance and satisfaction) (r=-.60, r=-.32, p=.001 respectively). Multiple hierarchal regressions revealed a predictive model of only two variables; age (B = -.22, p = .05) and residual renal function (B = -23, p =.012) for dietary nonadherence.
Conclusion: Identification of the factors that may worsen dietary and fluid nonadherence may lead to improved therapeutic interventions within the mainstream of medical practice for Jordanian patients with ESRD receiving hemodialysis.

228
Knowledge and Practice of Foot Care among Patients Seeking Diabetes Treatment at King Hussein Medical Center

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Objectives: To assess the knowledge and practice of foot care among patients seeking diabetes treatment at King Hussein Medical Center
Methods: Nine hundred and eighty two diabetic patients, either type 1 or type 2, were included in this study during the period from November 2011 to March 2012; every other patient who attended the endocrine and internal medicine clinics at King Hussein Medical Centre was invited to participate in the study. Patients who accepted to participate were interviewed by the investigator on individual bases using a structured questionnaire seeking information on knowledge and practice of foot self-care.
Results: A total of 982 participants, were involved in the study, 505 (51.4%) were males and 477 (48.6%) were females. Their age ranged from 18 to 83 years with a mean age of 52 years. Out of 982 participants, 16.6% had poor knowledge; and nearly equal percentages (41.9%, 41.5%) had satisfactory and good knowledge scores of diabetic foot care, respectively. The mean knowledge score for the participants was 6.6 (SD ±2.1). Regarding practice scores, 24.8% of the study participants had poor practice, 56.9% had satisfactory score and only 18.2% had good practice of diabetic foot care. The mean practice score for the participants was 7.1 (SD ±2.3).
Conclusion: Our study showed variation in the knowledge and practice of foot care among patients with diabetes in Jordan. Specifically, most of the participants had a satisfactory knowledge of foot care, yet they still have inadequate foot care practices.

229
Nurse Job Satisfaction and Retention among Different Health Care Units in Jordan: A Case Study of Islamic Hospital

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Objectives: The purpose of this study was to assess job satisfaction and retention among Islamic hospital nurses.
Methods: This study utilized a descriptive design. The sample included 150 staff nurses with one month or more experience working at the Islamic hospital. Data was collected using the Organizational Specific Predictors of Job Satisfaction questionnaire developed by Kruger et al 2002. The questionnaire consists of 65 questions and nine sections representing topic areas which are predictors of job satisfaction. This study focused mainly on answering: 1- What is the relationship between job satisfaction and retention? 2- What factors contribute to job satisfaction and retention among Islamic hospital nurses? 3- What are the differences in sample's demographics, job satisfaction and retention in critical and non-critical care units? Descriptive statistics in the form of mean scores were used regarding the independent variables to detect their effect on job satisfaction and retention.
Results: The mean overall impression of organization was 2.9. Results indicated that there is a lack of trust and effective communication within the organization. As a result of this, the feeling of reduced job satisfaction has developed. Nursing staff were satisfied with co- workers and supervisors support and assistance as well as quality of care provided to patient/ residents care.
Conclusion: According to the survey, it was concluded that most of the nurses like to stay in hospital where the relationship with their supervisors are positive. Administrator should be aware about the predictors of job satisfaction and use it as strategies, which should be implemented effectively for the retention of nurses for long time period and to reduce the turnover rate in the organization in an efficient way.

230
Postpartum Practices among Jordanian Women at King Hussein Medical Center

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Objectives: The objectives of this study were to describe the postpartum practices of Jordanian women and to identify the association between selected socio-demographic variables and postpartum practices.
Methods: Descriptive correlation design was used. The setting was maternal health clinics at the king Hussein Hospital. A convenience sample of 245 women in their postpartum period who met the study criteria were recruited for the study. Data was collected using two instruments. The socio-demographic information sheet and a self- administered Postpartum Practices Questionnaire (PPQ). Analysis was done using one way ANOVA and t-test.
Results: There were no significant associations between women's age, education and women's personal post-partum practices and postpartum practices of newborn. There was no significant association between personal post-partum practices and the person you are living with. There was a significant association between postpartum practices of the newborn and persons living with ($P < 0.05$) and postpartum practices of the newborn according to number of visits. In addition, for women's personal post-partum practices and postpartum practices of the newborn according infant sex, the results suggested significant association between the means according to sex, these differences were in favor the females ($P < 0.05$). There was a positive relationship between the women's

newborn practices with the other practices (religious, foods, and drinks).

Conclusion: Traditional practices are still evident among Jordanian women, nursing, midwifery, and other health professionals. Nursing curricula should contain cultural beliefs if nursing graduates are to have the suitable knowledge and skills to achieve a culturally competent care. A health education program should be conducted and the focus should be on maternal and child health centers as home visits.

231
Factors Influencing Students' Attitudes towards Midwifery Profession in Jordan: Tool Validation

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Objectives: This study validated an instrument that assesses student's attitudes towards midwifery in Jordan.

Methods: The study used a descriptive, cross-sectional, quantitative research design.

A purposive, convenience sample of 374 students representing private, governmental and military nursing and midwifery colleges answered a questionnaire developed by the researchers. The first part of the questionnaire included demographic questions. The second part consisted of 36 items which reflected three common themes which emerged from a comprehensive literature review. Descriptive statistics, exploratory factor analysis and measures of normality and reliability, including Cronbach's Alpha and Bartlett's test were done. Item loadings cutoff point was 0.5.

Results The result was three factors explained by 23 items. The first 8 items explained nearly 61% of the variance. The overall Cronbach's alpha was 0.834 with a range of .835-.839. The Spearman-Brown coefficient was 0.81. Guttman Split Half coefficient was 0.83, indicating an acceptable item correlation. The factors are: Professional knowledge, professional motivating factors and de-motivating factors.

Conclusion: The instrument is valid and reliable. However, it needs further use in other studies to confirm stability. Addressing the three factors is crucial to promote better understanding of students' knowledge and attitudes toward midwifery so that improvement can be promoted in the educational system and the profession.

Hall J Session 4
Nursing

232
The Effect of Infant Massage on Preterm Infant: A Systematic Review

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Objectives: The aim was to review the literature regarding the efficacy of infant massage in relieving pain in preterm infants.

Methods: A systematic search was made of 12 electronic bibliographic databases for randomized controlled trials on efficacy of infant massage for relieving pain among preterm infants covering the period 1980–2012. Search words were 'randomized clinical trials', 'preterm infant pain' and 'infant massage'.

Results: The search revealed 30 articles. In most of the studies coconut's oil and sunflower oil were used to massage the infant. Infant massage was found to be effective in increasing weight gain of preterm infants, decreasing pain during heel stick blood drawing, increasing the triglycerides level and also reducing the risk of nosocomial sepsis, thereby, improving survival rates among hospitalized preterm infants and significantly saving hospital cost.

Conclusion: There is strong evidence that infant massage relieves pain in preterm infants and massaging for pain has become standard practice in neonatal intensive care

in the developed world. We recommend that infant massage is implemented for stable preterm infants in our hospitals.

233
The Attitudes of Emergency Doctors and Nurses towards Family Presence During CPR in Queen Alia Military Hospital

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Objectives: To determine opinion of doctors and nurses for allowing family-witnessed resuscitation (FWR) during resuscitation attempt at emergency unit in Queen Alia Military Hospital
Methods: A descriptive study design was used. A convenience sample consisting of 18 doctors and 31 nurses working at the emergency department in Queen Alia Military Hospital in Amman participated in the study. A self report questionnaire developed by Iran university of medical sciences was used. Statistical analysis was done using frequencies and t-test. The SPSS version 17 statistical package was used to analyze the data.
Results: From 49 respondents 50% (18.4% of doctor and 40.8% of nurses) strongly agreed that the family should be given opportunity to witness CPR. The majority of the respondents (54%) did not believe that the presence of family during CPR would cause emotional stress for the CPR team, neither did the majority (63%) believe that the family would develop a bad reaction towards the CPR team after unsuccessful CPR. Only 38% of the respondents believed that family witnessed resuscitation (FWR) can assist the family in their grieving process.
Conclusion: Our survey in Queen Alia Military Hospital indicated that half of CPR responders in emergency unit in queen alia military hospital favor the presence of family during cardiopulmonary resuscitation process. We suggested discussion about the possible benefits family witness resuscitation process in during the CPR courses and emergency courses in the hospital. An effort should be done to provide appropriate space and enough team members to increase opportunity of family to witness the resuscitation process.

234
Nursing Documentation in Mental Health Setting

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Objectives: The aims of this study was to assess the nurses' documentation skills level following an educational program which focused developing an understanding of nursing documentation using the PIE technique as a method for documentation.
Methods: The sample consisted of ten nurses from Fuheis hospital (7 registered nurses and 3 practical nurses) who were recruited to attended our program.
Results: The result of this intervention reflect that nursing education program have a positive influence on improving documentation skills. Analysis also showed that age, years of experience, and the level of satisfaction were not affected significantly in the level of documentation improvement, but the level of education affected significantly on skills improvement. This gave us a hint that our intervention may be appropriate with the people within the same age group, with same number years of experience, and with same level of education.
Conclusion: An educational program that covers the needs of both staff nurses and practical nurses for documentation is beneficial in improving documentation. This program should be applied by specialist, and applied over a period of time to maximize their benefit.

235
Impact of Smoking on Peripheral Oxygen Saturation during Induction of General Anesthesia

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Objectives: To evaluate the effect of smoking on peripheral O2 saturation during induction of general anesthesia in Jordanian population.
Methods: Our prospective investigation included 237 patients of both sexes, aged 30-45 years, ASA1 and scheduled for various general surgical procedures at King Hussein hospital during the period August 2010 -2012. Induction of general anesthesia was achieved using intravenous propofol with inhalation of sevoflurane by senior anesthesiologist for three minutes during which peripheral oxygen saturation was recorded by adatex oxymeter model to all subjects. The study subjects were divided according to smoking habit into a non smoking (NS) group (n =83) and a smoker (S) group (n=154). The smokers were further divided into active smokers (AS) (n=113) and passive smokers (PS) (n=41).
Results: No patients in any group had saturation of 70-80% during induction of anesthesia. During the three minutes induction study oxygen saturation was 86-90% in 26.1% of PS and 34.9% of AS. Oxygen saturation was 91-95% in 39.1% of PS and 46.03% of AS.
Oxygen saturation was 96-100% in 34.8% of PS and 12.7% of AS.
Conclusion: Although active smokers had low readings of oxygen saturation, we should not miss passive smokers who also had such reading.

236
Knowledge about the Use of Contact Lenses and Their Care among Patients who Attend the Ophthalmology Clinics at King Hussein Medical Center

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Objectives: The aim of this study was to assess the knowledge of ophthalmology patients regarding use and care of contact lenses.
Methods: One hundred patients who attended the ophthalmology clinics participated in this study. They were asked to complete an anonymous questionnaire, focusing on their source of information about contact lenses, reasons for not opting to use them, care regimen, and attending the follow up aftercare visits.
Results: The percentage of patients previously used contact lenses was only 14%. Patients obtained their information from three main sources; the health care providers, advice from friends and family, and from advertisements. Each source had an equal percentage of 32% of patients. Despite therapeutic implications for contact lenses use, only 28% of patients would try using them, 68% of patients refused their use. They reasoned their refusal due to the fear of infection and the difficulty of contact lens handling and care. Less than half (40%) of contact lens wearers had proper knowledge about care regimen, and only 38% of patients would attend a follow up aftercare visit to check their ocular health.
Conclusion: It is very important for an ophthalmic health care provider to place more emphasis on patient education about the use of contact lenses, since most patients have inadequate understanding of the safety and the proper use of lenses as well as the care regimen and the cleaning solutions used. In addition, patients should be encouraged to attend their aftercare follow up visits.

237
Achieving Total Quality Management by Using Accreditation Standards at Queen Rania Al-Abdullah Children's Hospital: A Comparative Study between Staff and Patient Views

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Objectives: The study aims to assess the effect of implementing Accreditation Standards on Total Quality Management at Queen Rania Al-Abdullah Children's Hospital. The study also aims at investigating the effect of some specific accreditation standards (patient rights, infection control and prevention, training and education, medical file management, continuous quality improvement, documentation) on the awareness of the importance of implementing Total Quality Management.
Methods: A descriptive study was conducted to compare among the views of patients' families who received medical treatment at Queen Rania Al-Abdullah Children's Hospital and the attending staff's views regarding the implementation of Accreditation Standards and their perceived effect on health care quality. Data was collected using a questionnaire specifically developed for the study. A total of 560 patient families and 400 staff members in medical field which was selected according to size criteria participated in the study.
Results: The study findings indicated that staff at Queen Rania Al-Abdullah Children's Hospital display high level of awareness towards the importance of implementing Total Quality Management through Accreditation Standards. The study also showed a correlation between staff awareness of the importance of specific Accreditation Standards (patient rights, infection control and prevention, training and education, and continuous quality improvement) and awareness of the importance of implementing Total Quality Management.
Conclusion: The study indicates the importance of implementing accreditation standard to achieve Total Quality Management in health care services to achieve patient safety and patient satisfaction. The study recommended the continuous support and commitment of top management in implementing Total Quality Management principles. They should encourage employee participation through team work and quality care standards should be established in the working culture.

238
Assessment of the Factors of Chronic Pain in Hemodialysis Patients at King Hussein Hospital

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Objectives: To assess the factors of chronic pain incidence in patients who are on long term hemodialysis.
Methods: This study is a replication of the study published in the Clinical Journal of the American Society of Nephrology, 4: 1374-1380, 2009. A convenience samples of 100 patients who were undergoing maintenance hemodialysis for at least three months in King Hussein Hospital were enrolled in the study. A quantitative cross-sectional design was used for this study. Pain was evaluated using the Arabic version of Brief Pain Inventory. In addition to pain assessment, data were collected from each participant regarding age, gender, body mass index, time on dialysis, type of blood access, co-morbidities, and biochemical and hematologic parameters. The study was done from December 2011 to May 2012.
Results: Chronic pain was experienced by 65 patient, 38% (n=25) of them described pain as severe. The musculoskeletal pain, headache, neuropathic pain and chest pain were the most common forms of pain. The results showed that a higher

serum calcium levels in addition to intact parathyroid hormone were associated with chronic pain. On the other hand, Calcitriol (vit-D) had a secondary effect on chronic pain.

Conclusion: There is a multitude of factors affecting the development of chronic pain among hemodialysis patients, which should be considered together in managing patient's care. This study was cross-sectional in nature with relatively small number of participants, so future studies with a larger sample size is recommended.

239
The Impact of SBAR Communication Protocol on Nurse's Perception of Patient Outcomes at Queen Rania Al-Abdullah Children's Hospital

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Objectives: The purpose of this study is to assess the nurse's perceptions of effectiveness of the Situation-Background-Assessment-Recommendation (SBAR) communication protocol currently applied at the Queen Rania Al-Abdullah Children's Hospital.

Methods: This study was a qualitative case study at Queen Rania Al- Abdullah Children's Hospital that is implementing the SBAR communication protocol. Data were collected through 80 semi-structured interviews with nurses and nurse managers. Further observation of nursing activities and documentation related to the implementation of the SBAR communication protocol were carried out. Data were analyzed using a thematic approach.

Results: The study findings indicate that nurses at Queen Rania Al-Abdallah Children's Hospital display high level of awareness regarding the importance implementation of SBAR communication protocol. Most nurses think of SBAR communication protocol as a means of standardizing communication. They reported that SBAR actually is an effective communication tool which aids the development of communication between nurses. It is especially useful for communication of medical information related to children's health during handover and documentation in the medical file helping to minimize medical errors.

Conclusion The study indicates that nurse's believe the SBAR communication protocol used in their hospital has a significant impact in minimizing medical errors related to miss communication between nurses.

240
Effect of Breast Cancer Orientation Program on the Commitment to Breast Self Examination

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Objectives: To determine the effect of Breast Cancer orientation Program on the level of commitment to Breast Self Examination among health team members in King Hussein Medical Centre.

Methods: One Group Posttest only design was used. A convenience sample of 200 health care team members, who attended the Breast Cancer Orientation program during 2011 and 2012, was recruited. Data were collected by self-reported questionnaire which measured the sociodemographic variables in the first part, and the Commitment to BSE scale in the second part. The Commitment to BSE scale consists of 10 items, where the responses range from strongly agree (indicating high commitment) to strongly disagree (indicating low commitment).

Results: Around half of the sample (45%) was of age group 22-26 years. The overall mean of commitment level was 3.4(±.35). The results revealed that there was no significant correlation between the years of experience, educational level and commitment level ($p>.05$), while there was significant correlation between commitment and history of breast cancer in the family ($p<.05$).

Conclusion: The health personnel who attended the Breast Self Examination Orientation program reported high level of commitment to practice BSE Monthly.

Hall K Session 3
Allied Health Professions

241
Malnutrition Screening: An Analysis of the Evidence

Annalynn Skipper (USA)

Quick and easy to use malnutrition screening tools improve accuracy in identifying those with nutrition problems. In response to questions about the most effective nutrition screening tools and procedures, an international group of dietitians approached The Evidence Analysis Library® to conduct a project that would 1) evaluate nutrition screening tools that are valid and reliable identifiers of nutrition problems in acute care and hospital-based ambulatory care settings and 2) evaluate studies validating serum albumin and serum prealbumin as biomarkers of protein status. An oversight group composed of researchers and clinicians defined nutrition screening, identified research questions and developed conclusions based on the analysis of evidence. A lead analyst conducted structured searches of the literature for validated screening tools and studies that correlated changes in serum proteins with changes in weight and nitrogen balance in starved patients. Trained evidence analysts identified eleven nutrition screening tools that could be evaluated for their validity and reliability to identify nutrition problems of patients in acute care and hospital-based ambulatory care settings. One tool, the NRS-2002 received a grade I and four tools: the Simple Two-Part Tool, the Mini-Nutrition Assessment Short Form (MNA-SF), the Malnutrition Screening Tool (MST), and Malnutrition Universal Screening Tool (MUST) received a grade II. The MST was the only tool shown to be both valid and reliable for identifying nutrition problems. Four models of malnutrition were identified and 190 articles reviewed for change in albumin and prealbumin levels in response to protein and energy deprivation. No data were found to correlate changes in albumin or prealbumin with weight changes or nitrogen balance. Thus validated tools that are simple and easy to use are available for identifying nutrition problems. However, more studies are needed before serum proteins are recommended as indicators of protein status.

242
The Effect of the Amount of Olive Oil Consumed Daily at Al-Ashrafeih North Jordan on Obesity

Mohammad Mustafa Aqel (Nut. Eng.), Nut. Eng. Ahmad Lutfi Alquran from king Rania Alabdulla hospital for children, Nut. Eng. Malek Alzqoule from Nutrition Department, Nut. Eng. Sameer Alrusasey from king Hussein hospital, Nut. Eng. Loura Aljaafreh from Nutrition Department.*

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Objectives: to assess the amount of olive oil that consumed daily by people at (Al-ashrafeih) and to evaluate the effect of olive oil consumption on obesity.
Methods: This study was built on primary data collection through a questionnaire which is designed for this purpose. The sample of 317 peoples from (Al-ashrafieh–Irbid), during the period (January – April 2012) was collected using a questionnaire eliciting personal information and nutritional behaviors including the amount of olives oil intake,BMI (body mass index). Calculation of frequencies was used to analyze the data descriptively.
Results: 317 questionnaire analysis shows that 62% were male the rest 38% were female,48% ate 45gm olive oil daily (18kg a year), 25% ate 75gm olive oil daily (27kg a year), 17% ate 20gm olive oil daily (7.2kg a year), 9% ate 10gm olive oil daily (3.6 kg a year), according to BMI 29% were obese 37% were overweight 31% were within the ideal weight the rest 3% were under weight, 63% don't belief that olive oil adversely affect health (obesity).
Conclusion: As the amount of olive oil consumed the rate of over weight and obesity increase (65% of the sample), the amount of olive oil consumed consider very high compared with other countries. We recommend to take the suggested amount of olive oil because extra amount of the oil will trance into fat which will be stored in the body causing obesity.

243
Medical Nutrition Therapy in Hospitals and Healthcare

Annalynn Skipper (USA)

Because all humans must eat to survive, modifications to food and nutrient intake are one of the most cost effective and safest compliments to medical treatment for many common conditions. The course of more than half of the World Health Organization's list of most common causes of death can be altered with modifications to food and nutrition intake. For example, the incidence of heart disease, stroke and other cerebrovascular diseases respond favorably to a healthier diet, while COPD, HIV and tuberculosis increase energy requirements, and diet plays a role in both the development and treatment of diabetes. Public health programs designed to educate large populations about appropriate intake of specific foods and nutrients have been successful in improving health and preventing disease. For those with specific diseases and conditions, Medical Nutrition Therapy is part of an individualized plan designed to treat a nutrition diagnosis derived from the findings of an in-depth nutrition assessment. In the United States, Medical Nutrition Therapy is defined as the nutritional diagnostic therapy and counseling services for the purpose of disease management which are furnished by a registered dietitian (RD). Nutrition intervention and counseling has been shown to significantly improve weight, body mass index, hemoglobin A1C, blood pressure and serum lipid levels. MNT is also used to achieve significant health benefits by preventing or altering the course of diabetes, obesity, hypertension, disorders of lipid metabolism, heart failure, osteoporosis, and chronic kidney disease, among others. Medical Nutrition Therapy is the only treatment for celiac disease, lactose intolerance, some inborn errors of metabolism and malnutrition. Unless patients have opportunities to seek nutrition advice from trained professionals in the community, professional dietetics staff members in the hospital provide important education about the role of modified food and nutrient intake in managing disease.

244
The Effect of Food Sale Promotion on Unhealthy Dietary Choices for Consumers

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Objectives: To assess the effect of food sale promotion on unhealthy Dietary choices for consumers.

Methods: This was a descriptive exploratory study, based on questionnaire for 278 customers who attended a large mall in Amman, during the period (January-April 2012); the data was collected from consumers which include information about personal data, educational level, family income, nutritional knowledge, dietary behaviors. Statistical analysis was used to analyze data descriptively.

Results: 278 questionnaire analyses shows that the educational level for consumers varied where 43% post graduate of school, 37%still at school, 20%Bca. Degree, 57% have family income between 400-800 JD, 22% less than 400JD, 21% more than 800JD, 87% purchase food items without read food label, 92% attracted by sale promotion, 81% don't read expire date, 42% of food items are passed 2/3 of shelf life, 22% contain trans fats, 33% contain saturated fat, 64% high in calories content, 73% of the sale items are boor in fiber and nutrients.

Conclusion: 70% food sale promotion items contain at least one of the following: (1- trans-fat 2- saturated fat 3- high in calorie 4- are passed 2/3 of shelf life), 87% purchase food items without read food label. We recommend to read the food contents label, note the expire date for food sale items, exclude high calories, saturated fat and trance fat items (which consider very bad for human health) from purchasing menu, not to be attracted by food sale promotion unless ensure its safety and good quality.

245
New Strategy of Hospital Admission and Discharge in Light of Economical Crisis

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Objectives: To minimize health cost without affecting health services quality.
Methods: Interviews with all stakeholders and analyzing results. Meetings included doctors, nurses, patients, families and others. Besides, studying similar plans applied in other countries. Analyzing data collected to compare the new plan with the past situation.
Results: After studying outcomes, we had these results as recommendation to be followed: 1- Developing hospital external clinics and building better relations with healthcare centers within the area of each hospital. 2- Depending day care program and one day admission for surgeries. 3- Depending early discharge plan which include homecare and follow up. 4- Developing education program for families and patients including home visits. 5- Developing nurses' qualification and get them involved in this plan.
Conclusion: Benefits of the plan: 1- Decrease healthcare cost, 2- Improvement of health services, 3- Cancelling of more waiting lists, 4- More comfortable for both patients and families.

246
Psychological, Educational & Social Consequences of Dialysis on Children and their Parents at Queen Rania Al-Abdullah Hospital for Children

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Objectives: This study aimed to identify the effect of dialysis on children treated in Queen Rania Al -Abdullah Hospital regarding children's two aspects: Educational-schooling outcomes and Social interaction form, and on the other hand the effect of children's chronic illness on their parents.
Methods:1 -(Beck Scale) for measuring depression in the parents (caregivers) of the children with dialysis. 2-A questionnaire is designed to collect the required data related to the motivation toward schooling achievement. I have been using arithmetic averages and standard deviation values for the extraction of low, middle and high. 3-Interviewing each child's care giver (for the children's social interaction form).
Results: Results revealed that dialysis strongly and negatively affected the mood of their parents (65.4%) were depressed, it also indicated that dialysis has unconstructively affected the educational outcomes of these children in a moderate degree (62.39%) and finally it badly affected these patients on the social domain especially on the self image as a consequence of their chronic illness: negative self image (78.3%), and it also was generally revealed limitations on the children's social efficacy in (69%).
Conclusion: The research is important in understanding the effects of dialysis on psychological, educational and social outcomes on the children as patients and their parents. All medical team has to associate and take in consideration the psychological, educational and social consequences and aspects in dealing with these patients through giving a comprehensive and a fully needed services

WEDNESDAY
21 November 2012

Hall A1 Session 1
Plenary Session: Breast Cancer Update

247
Stereotactic Technique in Breast Pathology
Amal Smadi MD, Radiology (Jordan)

130 stereotactic breast biopsies were performed in the breast imaging unit, radiology department, K.H.M.C ,between November 2010-September 2012.
Biopsies were performed for abnormal breast calcifications, non-palpable breast masses or architectural distortion. Pathological results of these biopsies were collected and reviewed.

248
Narrow or Wide Margin after Breast Conserving Surgery in Breast Cancer
Ali Abuseini MD, Breast Surgery (Jordan)

The safety and efficacy of breast-conserving therapy (BCT) for women with early-stage breast cancer are well established. BCT entails wide excision of the tumor and appropriate nodal evaluation ,followed by radiation therapy to the breast. There is broad agreement that successful breast conservation requires complete tumor excision, commonly described as a "tumor-free" or "negative" margin oesection, but the definition of a negative margin is controversial.National SurgicalAdjuvant Breast and Bowel Project (NSABP) trials requires that tumor cells do not touch ink,butsubsequent retrospective single-institution studies have suggested that wider margins confer greater protection against local recurrence(LR).However, wider margin require re-excision with attendant social, psychological and economic cost, subsequently ends with mastectomy. But data regarding the optimal margin is conflicting, the commonly acceptable margin width is a 2-mm distance from the tumor to the ink. Herein, we have to discuss the conflicting and the debatable issues including the studies were conducted in this subject.

249
Extending the Role of Breast Conservation
Fiona MacNeill MD, Breast Surgery (UK)

Mastectomy for breast cancer can be devastating both physically and emotionally. With better cancer treatments many women are now cured and so have to live with this burden for many years. Breast conservation (always with radiotherapy) allows a woman to maintain her body image and supports more rapid psychosocial adaptation. However maintaining good quality breast aesthetics after traditional breast conserving techniques can be difficult especially for larger volume resections. Achieving the balance between aesthetics and good margins is difficult: however simple oncoplastic techniques such as parenchymal remodeling can allow better aesthetic outcomes.
In addition to enhancing aesthetic outcomes from breast conserving surgery traditional indications for mastectomy (large tumours, locally advanced, multifocality BRCA carrier etc) can be challenged using modern multimodality cancer treatments including oncoplastic surgery. We will discuss: neoadjuvant chemotherapy and endocrine therapy to downsize cancers to facilitate conservation as well as oncoplastic mammoplasty techniques that allow large volume resection but with maintenance of a shapely albeit smaller breast. Such approaches require careful multidiscipline team discussion and co-ordination.

250
Immediate vs. Delayed Breast Reconstruction after Mastectomy
Samher Weshah MD, Plastic & Reconstructive Surgery (Jordan)

Breast reconstruction after mastectomy is still a challenging subject in the field of plastic & reconstructive surgery. It's a rapidly evolving branch in which the plastic reconstructive surgeon plays a major role. There are two modes of reconstruction: autologous & prosthetic. Timing of reconstruction is either immediate or delayed. The decision on timing & mode of reconstruction should be combined between the patient & the surgeon.

Although we started applying those modes of reconstruction lately here in Jordan, this field is growing & expanding very rapidly. Factors which played a major role in this progress are: early detection of breast cancer, more patient awareness & education, well-trained plastic surgeons in this field, coordination between the breast surgeon & the plastic surgeon as well as availability of instruments & equipments (microscopes).
There are some obstacles which still delay further advancement in this field such as: mentality of the patients, availability of theater time, lack of help from the media with regard to public awareness.

251
Triple Negative Breast Cancer Treatment
Ahmed Othman MD, Oncology (Jordan)

252
Accelerated Partial Breast Irradiation: Current Practice and Future Prospects in Jordan
Abdulmajeed Dayyat MD, Radiotherapist (Jordan)

Hall A1 Session 2
Urology

253
Management of Organ Confined Prostate Cancer: Radical Prostatectomy and Management of its Complications
Manfred Wirth MD (Germany)

In Europe, prostate cancer is the most common non-skin malignancy in males. The application of PSA as a tool for early detection has led to a stage shift with localized and thus potentially curable stages representing the majority of newly detected cases. Since its introduction by Walsh and Donker in the year 1982, anatomic radical prostatectomy became one of the most frequently performed open surgical procedures worldwide. Up to now, only radical prostatectomy has been demonstrated to improve survival in clinically diagnosed prostate cancer in the setting of a randomized trial, compared with watchful waiting. Radical prostatectomy is the standard treatment of localized prostate cancer in men with an adequate life expectancy. It enables overall disease-specific 10-year survival rates of more than 90 %, when considering histopathologically organ-confined cases, disease-specific 10-year survival rates reach narrowly 100 %.
The treatment of clinically locally advanced prostate cancer (cT3–4) is subject to some controversies. Radical prostatectomy, external beam radiotherapy and early or deferred hormonal therapy are possible treatment options for clinically locally advanced prostate cancer. Multimodal treatment (a combination of these options) is frequently used, but there is only few evidence available defining patients who could benefit from such aggressive treatment.
Radical prostatectomy for locally advanced disease has the advantages of the remaining option of adjuvant radiotherapy. Furthermore, in patients with localized tumors in the prostatectomy specimen (about 25 % of clinically locally advanced cases), adjuvant hormonal therapy (that would be given after external beam radiotherapy) is spared.
In large centres, early and late complication rates are low. The rates for perioperative mortality range between 0-2 %, some experienced centers reported no case of perioperative death even among thousands of consecutive patients. Major bleeding (1-12 %), rectal injury (0-5 %), deep vein thrombosis (0-8 %), pulmonary embolism (1-8 %) are typical early complication associated with this procedure. Late complications that may occur are lymphoceles (0-3 %), anastomotic stenosis (0-15 %), urinary leakage (0-15 %), urinary incontinence (5-22 %), erectile dysfunction (depending on technique 14-100 %). There is a tendency towards less favorable outcome concerning continence and potency with increasing patient age. The outcome of radical prostatectomy is better in centers with a high case load and with experienced surgeons. Regarding the surgical approach, retropubic, laparoscopic and robotic radical prostatectomy have not been investigated in a prospective randomized trial yet. In experienced

hands, the results of the different surgical approaches seem to be similar.

254
Renal Cell Carcinoma: Clinicopathological Spectrum in the Past 20 Years

Ibrahim Banihani MD (Jordan)

Objectives of the study: To study the clinical presentation, pathological types, staging and clinical outcome in the period of study.
Methods: Retrospective study of all patients admitted to division of Urology (at Princes Basma hospital 1992 – 2000, and King Abdulla University hospital 2001 – 2011) with a diagnosis of renal cell masses. Age, sex, clinical presentation, method of management and pathological types, staging were analyzed.
Results: Files of 210 cases were retrieved and studded. 1992- 2000:
Urologic symptoms 67 (76.1%), Hematuria 29 (43.3%), Loin pain 21 (31.3%), Loin mass 03 (04.5%),
More than one primary symptom 14 (20.9%). General symptoms 13 (14.8%), Metastasis 3 (3.4%), Others 5 (5.7%)
2000-2011: Pain 28 (23.93%), Hypertension 19 (16.24%), Incidental 47 (40.17%)
Pathological Types and follow up in the two periods will be presented in details. The role of Tyrosine Kinas inhibitor will be discussed.
Conclusion: There is a great rule to detect these tumors at earlier stages thanks to availability of new diagnostic modalities and there is a new advancement in the medical therapy of metastatic cases.

255
Update on flexible Ureterorenoscopy

Thomas Knoll MD (Germany)

While percutaneous nephrolithotomy (PNL) is the treatment of choice for renal calculi larger than 20 mm, shock wave lithotripsy (SWL) is recommended for smaller renal calculi by most urolithiasis guidelines. However, SWL regularly requires repeated treatment sessions and therefore time and patience until complete stone clearance is achieved. In a substantial number of patients residual fragments remain within the kidney and lead to recurrent stone formation. Furthermore, SWL treatment of stones located in the lower pole often reaches unsatisfying stone free rates (SFR). On the other hand, several authors have demonstrated that PNL and, recently, flexible ureterorenoscopy (URS) achieve excellent stone free rates (SFR) for larger stone burdens and have reasonable low complication rates. This has led to an expanded indication for endoscopic stone treatment even for larger calculi.
According to European Guidelines, flexible ureterorenoscopy (fURS) is recommend only as 2nd line treatment for renal calculi <10 mm after failed SWL. This recommendation is based on a lack of evidence demonstrating efficacy of retrograde stone treatment as first line treatment and for larger stones. In many European centers real-life is far ahead those recommendations and fURS is regularly used as primary treatment for small stones, especially if located in the lower pole. Significant achievements in endoscopy technique, lithotripsy and disposables, but as well surgical skills supported this trend. In recent years several authors reported feasibility of retrograde stone removal even for larger stones, which are usually treated by PNL. In an own series, fURS could achieve high SFR after 4 weeks, which were close to what PNL reached. However, every 2nd patient required two procedures with significantly higher OR times and consequently a longer treatment period. Our results are in accordance to other series on fURS for large calculi. Another important aspect is the growing number of patients that cannot be treated by PNL. Higher incidences of cardiovascular diseases have led to wide use of anticoagulants. While bleeding disorders are seen as contraindications for both SWL and PNL, fURS demonstrated excellent safety in such patients. Furthermore, insufficient physical activity and malnutrition lead to increasing numbers of obese and morbid obese patients. Because of high skin-kidney distance, SWL efficacy is limited and PNL can be practically impossible if the puncture needle cannot reach the kidney, whereas fURS can be performed without limited outcomes.

Therefore, we believe that fURS will gain further impact in endourology. This talk will provide an actual update on technology, indications, techniques and outcome.

256
Nephron-Sparing Surgery

Manfred Wirth MD (Germany)

Open nephron-sparing surgery is performed in renal tumors in solitary kidneys, bilateral renal masses, tumors in patients with impaired renal function and unilateral masses smaller than 4 cm in diameter with a normal functioning contralateral kidney. Open partial nephrectomy also appears feasible in patients with tumors up to 7 cm in diameter, provided the tumor can be removed completely and a sufficient remnant of the kidney remains. A new development is the spread of laparoscopic partial nephrectomy and robot assisted partial nephrectomy. Recently retrospective studies comparing robotic partial nephrectomy with laparoscopic partial nephrectomy have been performed. These studies suggest a shorter learning curve and confirm the safety and feasibility of robotic partial nephrectomy. In order to decrease warm ischemia time, new techniques like the use of sliding-clip sutures or selective renal parenchymal clamping have been developed. However, further long-term studies of renal functional outcomes and oncological efficacy of robotic partial nephrectomy have to be performed. Regarding minimal invasive ablative techniques like radiofrequency ablation or cryotherapy, there are insufficient coherent long-term data available to adequately compare these techniques with a surgical excision. Therefore ablative therapies should be reserved for carefully selected high surgical risk patients with small renal masses <4 cm and should be performed within the framework of clinical trials.

257
The Pathological Spectrum of Testicular Tumors at King Hussein Medical Center

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Objectives: To determine the pattern of testicular tumors at King Hussein Medical Center
Methods: The study included all testicular tumors diagnosed from January 2005 to June 2012. All cases with histologically diagnosed testicular tumors were analyzed with regards to basic epidemiological data (collected from the request forms), the site of involvement, age distribution and histological types of tumors
Results: During the study period a total of 93 patients had testicular tumors, ranging in age from 11 to 75 years of age. The peak incidence was in 21-30 years age group. Germ cell tumors, of different subtypes, were the most frequent histological type (80/93, 86%), followed by sex cord stromal tumors (9/93, 9.7%). Lymphoma was only seen in four patients. Seminoma was the most common germ cell tumor encountered, followed by mixed germ cell tumor. There was similar incidence of tumors over left side compared to right side of testes
Conclusion: Testicular tumors are mostly germ cell tumors. A peak of incidence of testicular tumors occurred in young patients, which means that education programs aimed at early detection are recommended for this age group

258
Allograft Nephrectomy Following Kidney Transplantation: Preliminary Experience withPre-Operative Angiographic Kidney Embolization

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Objectives: Allograft nephrectomy following graft failure carries significant morbidity
Methods: Single center retrospective review of all adult patients undergoing allograft nephrectomy following deceased donor kidney transplantation, including a subset of patients who underwent pre-operative angiographic kidney embolization (PAKE)
Results: From 10/01 through 6/10, 853 adult patients underwent deceased donor kidney transplantation. With a median follow-up of 3.5 years, 174 patients (20.4%) developed graft failure and 38/174 (21.8%) underwent allograft nephrectomy. The rate of allograft nephrectomy was higher in patients with delayed graft function (DGF, Odds Ratio [OR] 2.15, p=0.023) and early graft failure (OR 1.7, p=0.064). For patients undergoing PAKE (n=13), the estimated intra-operative blood loss was reduced from a mean of 375 ± 530 ml to 100 ± 162 ml (p<.10), mean transfusion requirements were reduced from 3.36 ± 4.8 to 0.23 ± 0.44 units (p<.05), and total mean operating time was reduced from 192 ± 114 minutes to 141 ± 38 minutes (p=NS) compared to 13 control patients undergoing allograft nephrectomy in the absence of vascular thrombosis or PAKE
Conclusion: DGF and early graft failure are associated with a higher rate of allograft nephrectomy. PAKE may result in less blood loss, fewer transfusions, reduced operating time, and shorter length of stay, which may translate into reductions in morbidity.

259
Memokath Intraprostatic Stent: Outcome in High Risk Patients with Bladder Outlet Obstruction at King Abdul-Aziz National Guard Hospital, Al-Hasa - K.S.A

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Objectives: Memokath 028 represents a nickel-titanium stent that has been used to treat patients with bladder outlet obstruction who are unfit for TURP. We report the efficacy, safety, perioperative and late complications of Memokath stent used for high risk patients for TURP.
Methods: Retrospective study started from October 2008 to march 2012, we reviewed 40 cases of frail patient. Twenty five (25) of patients had urine retention, eleven (11) of them had severe LUTS, Four (4) patients had urinary tract infection. 31 of the patients underwent the procedure under local anesthesia using flexible cystoscopy. Treatment outcome was evaluated by patient satisfaction, post voided residual urine volume, absent of urinary tract infection, proper stent position.
Results: Mean age, mean operative time, mean hospital stay, mean follow up were 79.4yr.22 minutes, 1.8days, and 16 months respectively. 90% of the patients were catheter free. 95% were pain free. Urinary tract infection dropped from 10% to 2.5%. The most common immediate complication is hematuria which was seen in 9 patients, migration is the latest complication seen in 6 patients. 7 (17.5%) patients died during follow up with stent in situ.
Conclusion: The Memokath is a good option for frail elderly patients presenting with BOO. The procedure is safe and has minimal long term side effects. Also it saves the patients from having invasive procedure with high rate of complications such as TURP or Laser.

260
Intravesical Intramuscular Botulinumtoxin-A-Injection (IIB-A-I) in Patients with Neurogenic Detrusor Overactivity: 8 Years of Application

Awad Al-Kaabneh MD, Christoph Lang, Waseem Arafat, Saladin Alloussi, Robert Eichel, Schahnaz Alloussi*

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Objectives: To document the effectiveness and safety of Intravesical Intramuscular Botulinumtoxin-A-Injection (IIB-A-I) as aminimal invasive therapy for patients with Neurogenic Detrusor overactivity (NDO) .
Methods: Between 2002 and 2010, 64 patients with NDO were treated by IIB-A-I (DysportTM) under local anaesthesia if needed. The injections are performed including 3 out of 10 injection sites in the trigon (Neunkircher Schema). Patients are diagnosed and followed up by standardized questionnaire for control of subjective parameters and objective pattern by Videourodynamic (VUD) at 6 weeks interval within 3 month after injection. In addition to objectives parameters, VUD examinations visualize the morphological situation of urinary tract.
Results: The overall result shows a substantial improvement of functional bladder capacity, micturition volume and decrease of detrusor pressure. The subjective parameters like number of incontinence episodes, frequency and quality of live show significant improvement. The treatment was well tolerated and the appearance of postvoid residual in NDO was expected to improve live quality by satisfactory continence using intermittent self catheterisation
Conclusion: IIB-A-I is a safe, effective and minimal invasive treatment for patients suffering from NDO. The injection is easy to perform under local anaesthesia. No unexpected or systemic side effects occurred.

Hall A1 Session 3
Breast Surgery

261
Oncoplastic Breast Surgery: a Philosophy of Care

Fiona MacNeill MD, Breast Surgery (UK)

What is oncoplastic breast surgery? It is breast cancer surgery combined with established and innovative aesthetic techniques that allows both the best cancer and aesthetic outcomes. However oncoplastic surgery is much more than post mastectomy reconstruction: it is a philosophy of care that touches all aspects of breast surgery from careful biopsy scar planning and thoughtful mastectomy scar placement through to complex free flap reconstruction. However safe and effective cancer treatment remains the oncoplastic surgeon's priority: cosmesis should never be at the expense of high quality cancer surgery. We will explore how oncoplastic surgery has developed over the last 15years and in particular and what it can achieve for the modern breast cancer patient. We will also look at some of the potential oncological pitfalls of oncoplastic surgery.
In summary: Oncoplastic surgery is the future for breast cancer patients: the challenge is extending oncoplastic understanding and skills to all surgeons who operate on the breast.

262
Surgical Techniques in Oncoplastic Breast Surgery: Our Experience at the Royal Medical Services

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Objective: Oncoplastic breast surgery is the fusion of oncological and surgical principles to gain successful breast tumor excision with good cosmesis, to achieve this issue; there are varieties of surgical techniques that we have explored in our surgical practice.
Method: this study was conducted at King Hussein Medical Centre and Queen Alia Military hospital between May/2009 and May/2012, where 73 patients had breast cancer and phyllodes tumor underwent breast conserving surgery using oncoplastic

surgical techniques, different techniques used depending on tumor locations,
Results: 43 patients(60%) had lateral quadrant lesion: underwent lateral mammoplasty, 15 patient(21%) had lower quadrant lesions underwent T based on superior pedicle, 5(7%) patients had upper quadrant lesion underwent Bat Wing excision, one patient(1.4%) underwent Round block excision, two patients(2.8%) had central tumor underwent central quadrentectomy, 5 patients(7%) had tumor at internal quadrant underwent medial mammoplasty, two patients (2.8%) had inframammary fold lesion underwent excision with simple cutaneous plasty.two patients had surgical margin involvement that accomplished by completion mastectomy, all of the patients had satisfactory aesthetic results.
Conclusion: there are varieties of surgical techniques in oncoplastic breast surgery that could be used in breast conserving surgery which achieve a wide surgical margin and an a satisfactory cosmosis and minimize mastectomy in breast cancer patients

263
Take them both off: the Rise in Bilateral Mastectomies

Fiona MacNeill MD, Breast Surgery (UK)

Bilateral mastectomy, after the diagnosis of a unilateral cancer, is soaring in the US: in some centres up to 50% of mastectomies are now carried out with a contralateral mastectomy – usually on a healthy breast. This vastly exceeds the number of synchronous breast cancers and genetic testing/carriers. Does it reflect increasing use of MRI or are there other factors such as patient overestimation of contra lateral breast cancer risk, driving this alarming trend? How can we manage such patient requests in Europe and the Middle East? Bilateral mastectomy avoids the need for future breast screening and can allow reconstructive symmetry but it is unlikely to confer significant risk reduction as a woman's risk of dying from breast cancer is predetermined by her primary breast cancer. We need to counsel women with an already diagnosed breast cancer with regards to what bilateral mastectomy cannot achieve in terms of risk reduction. Adjuvant therapy will also modify risk of breast cancer in the opposite breast. We need to manage this drive towards bilateral mastectomy as it is a morbid procedure- especially if combined with bilateral breast reconstruction.

264
Post Z11: More Axillary Controversies

Fiona MacNeill MD, Breast Surgery (UK)

Sentinel lymph node biopsy is now the axillary staging technique of choice for the patient with early breast cancer who is unlikely to been node positive. The NSABP 32 trial has shown that SLNB is equivalent to axillary clearance in terms of accuracy and safety but with lower morbidity. The question now is how do we manage the modern SLN positive patient? Axillary clearance the traditional recommendation is more difficult to justify as fewer women have additional axillary disease on completion clearance. Increasingly SLNB is both a staging and a therapeutic procedure.
Z0011 has shown equivalent survival and axillary relapse rates for SLN positive woman randomised to completion clearance or no further surgery – despite the fact that nearly 30% of the group who had no further surgery had residual axillary disease. Historically the survival benefit of axillary clearance has always been difficult to prove, even for patients with locally advanced disease. Is axillary clearance becoming a historical operation? We will discuss other recent axillary controversies including the value of intraoperative SLN assessment, and the timing of SLNB with neoadjuvant therapy and reconstruction.

265
Biological Features of Breast Carcinoma in Postmenopausal Women

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Objectives: Breast carcinoma is the most common cancer in females, its incidence increases with age. The aim of this study is

to analyse the biological features of breast carcinoma in postmenopausal women.

Methods: Our study included 68 postmenopausal patients who underwent modified radical mastectomy in King Hussien Medical Center during the period between Jan 2007 and December 2011. We divided our patients into two groups: 46 Young postmenopausal patients (YPM) aging from 50 to 64years, and 22 elderly postmenopausal patients (EPM) who are 65 years of age and above.
Results: Both age groups (YPM and EPM) had the same range of tumor size, that is 2cm and above tumour size was found in 80% and 81% respectively. YPM patients were found to have greater lymph node involvement (76%) in comparison to EPM (63%). They also showed more incidence of peritumour vascular invasion (60%) than the EPM patients (50%). Both age groups showed similar Estrogen and Progesterone receptor expression (80% and 77%) respectively.
Conclusion: Although both groups showed almost the same range of tumour size, older patients (EPM) were found to have tumours with more favorable biologic characteristics in comparison to younger age group (YPM) in regard to lymph node involvement and peritumour vascular invasion. Tumour responsiveness to hormonal therapy was similar in both groups.

Hall A1 Session 4
Nephrology

266
Chronic Kidney Disease: Management by Stages
Martin Kuhlmann MD (Germany)

Chronic kidney disease (CKD) is a major cost burden for health care systems world wide. According to the glomerular filtration rate (GFR) CKD is divided into 5 stages, which are associated with an increasing risk for cardiovascular mortality. Therapeutic targets in the management of CKD include i) the retardation of progression to end-stage renal disease (ESRD = CKD-5D) and ii) the reduction of cardiovascular morbidity and mortality. Since the risk of progression to ESRD is highly associated with the presence and degree of albuminuria, preventive strategies should be focussed on selected populations of higher-risk patients. Besides treatment of the underlying disease, measures to retard the progression to ESRD include chemical blockade of the renin-angiotensin system, normalization of blood pressure, optimization of diabetes care, prescription of vitamin D receptor agonists and bicarbonate and potentially the application of antioxidative compounds. Secondary consequences of reduced GFR, such as anemia, metabolic acidosis, mineral and bone disease, volume overload and electrolyte disturbances occur preferentially during the later CKD stages (4 and 5) and need to be approached specifically. Due to a reduced spontaneous energy and protein intake there is an increased risk for development of malnutrition during later CKD stages. Therefore, mild dietary protein restriction (0.8 g/kg/d) should be applied with caution.

267
Patient Empowerment in the Management of Hyperphosphatemia in Dialysis Patients
Martin Kuhlmann MD (Germany)

Despite advanced technology and regular and efficient dialysis treatment the prevalence of hyperphosphatemia in dialysis patients still is unacceptably high. Nevertheless, a neutral phosphorus balance levels can generally be achieved by optimization of dialysis prescription in combination with individualized dietary and medical strategies. Besides increasing the fraction of iP removed by convection through the application of hemodiafiltration, extension of daily or weekly dialysis treatment time is the most promising way to a neutral phosphorus balance. Dietary phosphate restriction, the second corner stone of phosphate management, bears the risk of development of protein malnutrition. Phosphate binders (PB) effectively reduce intestinal iP absorption, but are mostly dosed inadequately in relation to meal phosphorus content. Phosphate management can be substantially improved by enabling patients to self-adjust PB dose to individual meal phosphate content,

similar to self-adjusting insulin dose to carbohydrate intake by diabetics. The novel Phosphate Education Program (PEP) provides a simple training tool to instruct patients to eye-estimate meal phosphorus content based on Phosphorus Units (PU) instead of milligrams. PEP is the first approach applying the concept of patient empowerment to the management of hyperphosphatemia in dialysis patients.

268
Resistant Hypertension: New Treatment Strategies

Martin Kuhlmann MD (Germany)

Resistant arterial hypertension is defined as an insufficiently lowered blood pressure despite the use of 3 adequately dosed antihypertensive compounds including diuretics. The first step in the management of patients with resistant hypertension should always be the exclusion of secondary causes for hypertension, such as Conn syndrome, renal artery stenosis or renoparenchymal disease. New drug treatment strategies include the use of aldosterone antagonists, which have been shown to be effective even in patients without adrenal adenoma. Bilateral renal denervation therapy is a novel approach, which has been demonstrated to be able to lower systolic blood pressure by more than 30 mmHg within 6 months after the intervention.

269
Kidney Transplantation at King Hussein Medical Center: Medical Complications and Outcome

Ayham Haddad MD, Ibrahim El- Smadi MD, Munthir Hijazat MD, Amen Al-Qdah MD, Kateba Al-Rabadi MD, Hussein Al-Shibli MD, Sameer Al-Sheab, MD, Ann Marji RN*
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Objectives: Royal medical Services was the pioneer both in Jordan and the Middle East by performing kidney transplantation first in 1972. We conducted this retrospective study to determine the outcome and medical complications of kidney transplantation at King Hussein Medical center

Methods: over the period of three years from January 2008 tell December 2010 all patients who underwent kidney transplantation at King Hussein Medical center were included in this study with a minimum period follow up of one year

Results: 188 kidney transplantation were done during the study period, 11 cases were children leaving 177 cases of adults. two transplants were from deceased donor and 175 cases were from living related donors. of the 177 cases 7.9% developed acute rejection, 11.3% developed various infectious complications, 12.4% developed post transplant diabetes mellitus, Biopsy proven chronic allograft nephropathy in 2.2%, recurrence of primary renal disease in 2.2%, graft failure in 3.3% and death with functioning graft in 3.3%

Conclusion: Kidney transplant is a valuable treatment option for renal failure. our experience shows a low incidence of medical complications and good long term out come in kidney transplantation. Early detection of the anticipated complications and aggressive management are needed to preserve the graft function and decrease both morbidity and mortality.

Hall A2 Session 1
Plenary Session: Dentistry 1
Prosthodontics, Periodontics, Maxillo-Facial Surgery, Conservative Dentistry, Orthodontics

270
Location Location Location. Where to Plan to Plant your Implant to Get the Best Return on Your Clients Investment? The Aesthetic Zone!

Dr Rajesh Patel, Implantology (UK)

The ultimate goal in the management of missing teeth is a stable and functional aesthetic restoration, which is predictable and reliable. This talk will develop the importance of optimal 3D placement to maximize the aesthetic result and discuss how this is influenced by local anatomy, biology, implant design and operator experience.

271
The Divide and Rule Principle in Complex Treatment Planning for the Rehabilitation of the Failing Dentition: An Organizational and Logistic Approach using Implants

Dr Rajesh Patel, Implantology (UK)

We often encounter clients with a failing dentition and despite being armed with the dental implants, the management approach is probably the most important factor in delivering a controlled and well considered long term result. These discussions will envelope the ideas, which can assist the practitioner to adopt a sensible and structured approach to treatment planning.

272
Surgical Approaches to Manage Aesthetic Failures and to Improve Gingival Harmony

Dr Rajesh Patel, Implantology (UK)

The essence of the world today is too look good. Numerous cosmetic plastic procedures are done to do this, but in implant dentistry the ability to deliver consistently can be challenging. This talk will illustrate some of the augmentation techniques, which can enable us to try and improve the soft tissue outcome.

273
Peripheral Neurectomy for the Management of Trigeminal Neuralgia

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Objectives: To evaluate the effectiveness of trigeminal nerve peripheral neurectomy in the treatment of Trigeminal Neuralgia.
Methods: Twenty four patients with third branch Trigeminal Neuralgia had previously received all medical treatment modalities; cryotherapy, and alcohol injection. Peripheral neurectomy (resection of both lingual and inferior alveolar nerves) was performed to impede pain recurrence.
Results: Among the 24 patients, 24 achieved absolute relief of pain in the first two years, 22 patients remained pain free for the following two years, the other two patients experienced pain symptoms again, however, they showed excellent response to medical therapy using Carbamazepines.
Conclusion: Peripheral neurectomy is a safe and effective procedure especially for elderly patients having a limited life span and suffering from trigeminal neuralgia.

274
Periodontal Treatment Needs and Oral Ulceration in Children and Adolescents with Celiac Disease

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Objectives: To determine periodontal treatment needs and incidence of oral ulceration among children and adolescents with celiac disease.
Methods: A prospective study was conducted on a total of 86 patients divided into two equal groups of matching age and gender. The first group consisted of 43 patients diagnosed with celiac disease who were regular attendants of the pediatric gastrointestinal clinics, and the other group consisted of 43 healthy dental patients. Both groups were questioned for the history of recurrent mouth ulcers, and the frequency of tooth brushing. Dental examination included: Plaque Index, Gingival Index, and Community Periodontal Index of Treatment Needs (CPITN). The oral mucosa was examined for any lesion consistent with apthus ulceration.
Results: There were 26 females and 17 males with a mean age of 13.22±2.85 and 13.35±2.59 years for the study and control groups respectively. Tooth brushing frequency and plaque scores were significantly worse among the study group with no significant difference in gingival scores. Apthus ulceration was more frequent among celiac patients compared to controls (30.23% vs. 20.9%). However, the result was not statistically significant. CPITN revealed no significant difference between celiac and control groups

although the mean index was higher among the celiac group. The highest percentage in both groups was for score 2. Shallow and deep pockets (3 and 4mm) were greater in celiac patients.

Conclusion: Even though periodontal treatment needs and recurrent apthus stomatitis are higher among celiac children, the results were not statistically significant. However, oral hygiene status was significantly worse in celiac patients. Therefore, oral health education programs may be indicated for children and adolescents with celiac disease.

275
Orthognathic Surgical Midline Closure in a Periodontally Compromised Case

Dr.Amjad Warawreh, Dr.Mohammad Al-Khawaldeh, Manal Abu AL-Ghanam*
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Objectives: This case report describes a medically fit, 25 year-old female patient who presented to our clinic with severe skeletal class III malocclusion accompanied by an anterior open bite, severe loss of periodontal attachment and gingival recession.
Methods: The patient was referred from Prince Rashid bin Al-Hassan Hospital in Irbid and was managed by a combination of orthodontic, orthognathic and periodontal treatment. Orthodontic treatment was started one year earlier using a fixed appliance. Gingival recession was found in the lower incisor segment in addition to a midline space of 7mm between the mesially tipped lower central incisors. Special orthodontic consideration in decompensation was undertaken followed by a Bi-Maxillary Orthognathic Surgery (Maxillary Differential Impaction and Mandibular Bi-Sagittal Split Osteotomy – BSSO, in addition to Mandibular Midline Osteotomy).
Results: The compound surgery was followed by intensive post-operative orthodontic & periodontal procedures.
Conclusion: A successful outcome was achieved as a final result.

Hall A2 Session 2
Plenary Session: Dentistry 2
Endodontics, Conservative Dentistry

276
Post-Treatment Endodontic Disease and Re-Treatment - Biological Sciences

Prof Paul Dummer, Endodontics (UK)

This lecture will cover the critically important subject of root canal re-treatment using a conventional (non-surgical) orthograde approach in order to cure what, to date, has been termed post-treatment periradicular disease that persists or emerges following primary root canal treatment. The overall aim is to provide a critical review of the essential components of this fascinating, compelling, and complex field within Endodontology, and to provide biological information across the entire spectrum of the challenges that face dentists on a day-to-day basis. Thus, the lecture will appeal to those who wish to learn more about the epidemiology of periradicular disease following root canal treatment, those interested in the aetiology of the disease, as well as those clinicians who need to understand what treatment is required. The lecture focuses on the biological sciences that underpin the clinical sciences.

277
Proper Use of Antibiotics in Dental Practice

Moeen Al Weshah, BDS,MSc, JB (Endo) Senior Specialist in Endodontics/Conservative Dentistry Queen Alia Military Hospital (Jordan)
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Objectives: Since their introduction; antibiotics (antibacterial not antimicrobial drugs) saved the life of millions of peoples. However, in addition to their cost, toxicity and the possible development of allergies, the improper use of antibiotics not only result in development of bacterial strains that are resistant to relatively safe antibiotics but also shift the management of some infections toward strong antibiotics that could be more toxic, more expensive and in some cases of restricted route of administration.

Methods: Contrary to our current status where we easily access antibiotics, in the modern world, antibiotics not only are inaccessible through community pharmacies without prescription, but in addition, the physician and dentist would not easily prescribe it. Moreover, the adverse effects of the use/abuse of antibiotics led the American Heart Association to decrease the number of cardiac patients that should receive antibiotics (prophylactic antibiotics) prior to surgical interventions including dental procedures.
Results: The aim of this presentation is to emphasize the importance of proper use of antibiotics in general dental practice particularly in Endodontics and to revise the recommendations of the American Heart Association, American Academy of Orthopaedic Surgeons and the American Dental Association with regards to prophylactic antibiotics.
Conclusion: Proper use of antibiotics should be taken seriously and only when indicated.

278
The Effect of Full Strength Sodium Hypochlorite on Determination of Working Length in Canals of Anterior Teeth Measured by Apex Locator DSP (In Vivo Study)

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Objectives: Traditionally the point of termination for endodontic instrumentation and obturation has been determined by radiographs. The development of the electronic apex locator has helped make the assessment of working length more accurate and predictable. This study were designed to evaluate the effect of full strength sodium hypochlorite (5.25%) as the irrigant of choice in root canal therapy used by a large group of Endodontists, on the reading of apex locator DSP and later the success of endodontic treatment. In addition, the principles of working of apex locator and its generations will be presented.
Methods: The length of a total of 128 canals of anterior teeth (incisors and premolars) was measured. Two readings for each canal were taken, one with normal saline and the other with full strength sodium hypochlorite (5.25%) inside the canal using Apex Locator DSP (Septodont).
Results: Most of the Apex Locator readings were affected by full strength sodium hypochlorite; 93 readings were shorter and 3 were longer when compared to readings taken with saline, however, 32 readings were the same with both irrigants. The statistical analysis shows that there is no significant difference between the readings of apex DSP with both irrigants.
Conclusion: The reading of Apex Locator DSP is not affected by full strength sodium hypochlorite.

279
White versus Grey MTA: Systematic Review

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Objectives: To conduct a systematic review of the literature on the difference between White and Grey Mineral Trioxide Aggregate (MTA) in Endodontics, and to identify and examine factors influencing its structure.
Methods: Accepted guidelines were followed. White and Grey MTA were covered. Comprehensive search of electronic databases generated 65 research reports. Those considered relevant were assessed for validity and quality according to agreed criteria. The analysis was descriptive.
Results: Relevant research reports were categorized, according to agreed criteria, as being of satisfactory validity and quality. The chemical constitution of all materials tested was similar. They suggested that Biocompatibility testing of both prototypes of cements showed the presence of no toxic leachables. The difference between Grey and White MTA has been reported to be the difference in minimal concentration of some chemicals used in their composition (specifically iron). The findings were supported by the totality of studies reviewed.
Conclusions: No difference exists

between Grey and White MTA except in soft tissue esthetics when used as hard tissue replacement and both showed successful results clinically.

Hall A2 Session 3
Plenary Session: Dentistry 3
Pedodontics, Orthodontics

280
A Review of Paediatric Dental Trauma
Prof Richard Widmer, Pedodontics (Australia)

This presentation will broaden the concept of trauma in the paediatric dental population to include not only dento-alveolar issues, but include all "trauma", however it manifests in a child's early life.

281
Common Oral Pathology: The Medical/Dental Interface
Prof Richard Widmer, Pedodontics (Australia)

A recognition of the oral manifestations of systemic disease as well as the recognition of the general health implications of dental disease are very important in dental practice is we are to improve oral health for the whole population.

282
Relationships in Dental Practice: Caring for Children in the Dental Environment
Prof Richard Widmer, Pedodontics (Australia)

We all need to be as good as we can when doing our restorative dentistry, however it is even more important to be aware of the physical, social and intellectual development of a child and how this influences the relationships in the dental surgery and ultimately delivery of the best care possible.

283
The Use of Midazolam as Oral Sedation in Pediatric Dentistry
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Objectives: Oral sedation is a technique in which the use of a drug or drugs produces a state of depression on the central nervous system enabling treatment to be carried out, however during which verbal contact with the patient is maintained.
Methods: Consent form should include documentation and discussion of potential risks, benefits and complications following the procedure in addition to possibility of failure and consequences of not providing sedation/analgesia. Medical history should include all current medications as well as past dental history and experiences. Patients classed as ASA I or II can be treated with oral sedation. Anxiolysis, sedation and muscle relaxation are the clinical effect of Midazolam. Flumazenil reverses sedation, respiratory depression, paradoxical agitation, and causes cessation of amnesia following its administration.
Results: The clinical use of Midazolam in oral sedation will be presented and the potential benefits will be discussed.
Conclusion: The use of Midazolam as oral sedation in Paediatric Dentistry delivers safe sedation to all uncooperative children.

284
Failure of Eruption of Primary Maxillary Central Incisor
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Objectives: To present a rare case of failure of eruption of primary central incisor localized to the maxilla, in a four year old girl.
Methods: Extra oral examination showed no abnormal signs, asymmetry or lymphadenopathy. Intra-oral examination revealed a buccal bulge in the region of the unerupted tooth which was asymptomatic. Radiographic examination showed a small single radio-opaque structure representing the crown of the impacted deciduous tooth. This was surrounded by dense radio-opaque bone. Root formation was incomplete at that time. The successor tooth was present with wide radiolucent pulp chamber. Neither odontomes, nor supernumerary teeth were present. Considering the age of the child, the position of primary central incisor, and the location and developmental stage of the permanent central incisor, it was decided to surgically remove the impacted tooth. The tooth along with the surrounding

tissue was sent for histo-pathological examination. Periodic follow up visits were advised to monitor the developing dentition and the available space.
Results: The histological finding was consistent with fibroma with reactive giant cells
Conclusion: Diagnosis and management of tooth eruption failure is difficult. It is important to carefully monitor the eruption of primary and permanent teeth for early identification and management of developmental anomalies.

285
Pain Perception in Patients Treated by Fixed Orthodontic Appliances and its Effect on their "Quality of Life"

Mohammed Odeh Al-Ma'ani; BDS, MSc, JDB in Orthodontics, Orthodontist, Princess Haya Al-Hussein Hospital, Royal Medical Services (Jordan)
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Objectives: To investigate pain perception in orthodontic patients treated by fixed appliances and its effect on their "Quality of Life".
Methods: The sample for this study consisted of 276 patients attending the Orthodontic Clinic at Princess Haya Bint Al Hussein Hospital during the period from March 2010 to October 2011.Patients were divided into two main groups; Adolescents (A), under the age of 18 years, and Adults (B), above or equal to 18 years of age. Group A comprised 169 patients; 117 females and 52 males, while group B comprised 107 patients; 72 females and 35 males. A fixed orthodontic appliance and an aligning wire were fitted for each patient. On the recall visit, patients were asked to fill a questionnaire, requiring a 5-10 minutes interview.
Results: 90.2% of orthodontic patients involved in this study suffered from pain due to braces. No significant gender differences were found in The Pain Intensity Scores. Significant differences in pain perception according to the age groups were found starting the following day of bonding extending to the recall visit, with p values ≤.05. For group A, the mean of the Quality Of Life (QOL) scores was 3.29±4.3, while the other group scored a mean of 5.46±5.5. This difference among the two groups was statistically significant. 49 adult patients (45.8%) and 66 adolescent patients (39.1%) used pain killer medications.
Conclusion: The highest ratio of the patients reporting pain following orthodontic treatment was on same day of bonding. Pain intensity and ratio of patients experiencing pain were higher in the adult group when compared to the adolescents, while no significant gender differences could be found among both groups. Effects of orthodontic treatment on QOL of adult patients were higher than those observed in adolescent patients. Analgesic consumption was higher in adult patients when compared to adolescents, and in females when compared to males.

Hall A2 Session 4
Plenary Session: Dentistry 4
Prosthodontics, Conservative Dentistry, Periodontics

286
All-Ceramic Restorations: Choosing and Using the Right Material

Dr Esam Alem, Prosthodontics (Jordan)

In recent decades, extraordinary developments in the technology of dental ceramics have provided dentists with a plethora of choices for all-ceramic restorations. These materials have gained popularity due to their excellent esthetics, biocompatibility and predictability. In a short span of time, all-ceramic restorations have progressed swiftly from simple porcelain jacket crowns to CAD/CAM restorations and beyond. A broad range of materials is currently available that vary according to the type of porcelain (e.g., feldspathic, low-fusing, leucite-reinforced, lithium disilicate, zirconia), the method of ceramic processing (e.g., fired, sintered, cast, pressed, machined) and the market presentation. However, the availability of such a wide array of ceramics can and does create confusion when choosing the optimum material for specific clinical situations. The situation is confounded by much misleading information in the commercial literature and a general deficiency of clear treatment

guidelines. The aim of this lecture is to provide a brief overview of available ceramic materials and to present the dental practitioner with a simple set of systematic guidelines for treatment planning for all-ceramic restorations.

287
Evaluating the Relative Optical Translucency of Four Opaque and Composite Resins

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Objectives: To measure and compare the relative optical translucency of the opaque resins of both laboratory and clinical composites.
Methods: Four discs, 13 mm in diameter and 1 mm in thickness, of the opaque resins of two laboratory composites (Sinfony & Solidex) and two clinical composites (Pertac hybrid & Esthet. X) were prepared. One disc was prepared for each material using a silicon mold 13 mm in diameter and 1.5 mm in thickness by curing the material in layers of suitable thickness. The discs were then finished using a 600 grit silicon carbide. The final thickness of the discs after polishing was 1.0 mm. Finally the discs were dried in an oven at 90º C for 24 hours. A Perkin Elmer Spectrophotometer with an integrating sphere was used to measure the total transmittance of each disc between 400-700 nm at 1 nm intervals.
Results: The total transmittance of the opaque resins of the laboratory composites was 0.03% for Sinfony and 0.05% for Solidex, while for the clinical composites it was 39.22% for Pertac hybrid and 45.88% for Esthet. X.
Conclusion: Opaque resins of the laboratory composites are extremely opaque while opaque resins of the clinical composites are quite translucent.

288
Perception of Jordanian Population to Altered Dental Aesthetics via Composite Resin Restorations

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Objectives: Composite resin restorations have had a great amount of development in recent years with regards to physical, chemical as well as aesthetic properties, making them more appropriate and reliable than any time ever. Although many other materials as well as techniques have risen, composite resin restorations remain the simplest, cheapest and least destructive. In this study, we will reveal the impact of alteration of dental aesthetics using composite restorations, on a sample of the Jordanian population.
Methods: Digital photographs were taken before and after treatment for a randomized selection of 8 cases out of 30 which have received aesthetic alteration using composite restorations by the same clinician. A questionnaire was constructed based on the evaluation of two albums (A, B). The first album (A) contained 16 randomized pictures of the selected cases. The second album (B) contained the same 16 pictures in order of before and after. The study sample consisted of 320 participants, with an age range of 15-60 years (average 25years) from the North, Middle and South of Jordan.
Results: The percentage of improvement in the randomized album based on people evaluation was 37.1%. On the other hand, the percentage for the same pictures was 82.9% when they were organized in before-after manner.
Conclusion: Digital photographs should be taken before and after alteration of the dental aesthetics with composite restorations in order to increase patients' compliance and satisfaction

289
Anti-Bacterial Effect of Octenaidol 0.1% Mouth Wash on Streptococcus Salivarius Biofilm: Comparison of Two Laboratory Methods

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Objectives: To investigate the effectiveness of Octenaidol 0.1% Mouth Wash on the Streptococcus Salivarius Biofilm formation using two laboratory methods; The Live/Dead BacLight Kit (Molecular Probes, Eugene, OR) and The Culturing and Plate Counting (Colony Forming Unit, CFUs), through five different time points.
Methods: The Streptococcus Salivarius culture was prepared over night, followed by exposing the titanium discs to Tryptic Soya Broth (TSB) for 30, 60,120 & 300 seconds respectively for 24 hours via flow chambers. Using two different types of laboratory methods; The Live/Dead BacLight Kit (Molecular Probes, Eugene, OR) and The Culturing and Plate Counting (Colony Forming Unit, CFUs), the difference in the effectiveness of Octenaindol 0.1% M/W on the Streptococcus Salivarius Biofilm formation was investigated.
Results: The longer the exposure of the titanium discs in flow champers to 0.1% Octenaidol, the stronger its effect on the formation of Streptococcus Salivarius Biofilm particularly in the Live/Dead staining method compared to the Plating method.
Conclusion: According to this study, one laboratory method is insufficient to confirm the effectiveness of Octenaidol 0.1 % M/W on Streptococcus Salivarius Biofilm formation, thus at least two methods are recommended to be used.

Hall B Session 1
Plenary Session: Osteoporosis

290
Role of DEXA Scan in the Diagnosis of Osteoporosis

Hussam Kaylani MD, Nuclear Medicine and Radiology (Jordan)

291
The Muscle-Bone-Unit: A Functional Approach in Childhood Osteoporosis

Eckhard Schoenau MD, Rehabilitation and Rheumatology (Germany)

How then can densitometric data in children and adolescents be evaluated in a rational way? We propose a functional approach to this fundamental problem, which takes into account the balance between bone strength and the forces that normally challenge bone stability. The largest physiological loads on a bone result from muscle contraction. Even during everyday activities muscle contraction routinely puts much larger loads on the skeleton than the simple effect of gravity, because muscles have to move the body around by using quite unfavourable lever arms. Therefore, bone stability needs to be adapted to muscle force. This functional muscle-bone relationship could be used for diagnostic purposes, when densitometric surrogates of bone strength are compared with indicators of muscle force. Thus, when the musculoskeletal system is analysed as a functional unit, the question arises of how "normality" should be defined. Bone strength may be adapted adequately to local muscle force, but if muscle force is abnormally low, this means that bone strength is decreased also. Therefore, it is necessary to not only evaluate the adaptation of bone strength to muscle force, but also to test whether muscle force is normal. Because muscle force is largely determined by body height, muscle parameters should be related to body height. Using muscle cross-sectional area (CSA) as a surrogate of muscle force rather than actual force, measurements might be advantageous in children, because muscle CSA can be measured more precisely and does not depend on motivation and mood. The aim of this study was to develop a simple diagnostic algorithm to evaluate musculoskeletal adaptation and thus create an index of the "functional muscle-bone unit." Although this investigation was performed using pQCT, the algorithm should be sufficiently simple to be adaptable to other densitometric methods. Therefore, we used BMC as an indicator of bone strength because this probably is the

most basic densitometric parameter. We established height dependent reference ranges for muscle CSA at the forearm and muscle-related reference data for radial BMC at the same site. These data were used to test the proposed diagnostic approach in various pediatric disorders with skeletal manifestations.

292
Estrogen Deficiency and Osteoporosis

David James MD, Gynecology (UK)

Traditionally estrogen deficiency has been considered the central mechanism of osteoporosis in women.
More recent evidence (epidemiological in humans and mechanistic studies in rodents) suggest that two other factors play a crucial interrelated role

Oxidative stress

- Reactive oxygen species (ROS) influence the generation and survival of osteoclasts, osteoblasts, and osteocytes.
- Defence against oxidative stress is important for skeletal homeostasis at any age. Loss of estrogens (or androgens in men) decreases defense against oxidative stress in bone, and this accounts for the increased bone resorption associated with the acute loss of these hormones.
- Increased ROS-activity may be responsible for the clinical association between osteoporosis and type 1 and 2 diabetes on the one hand and atherosclerosis on the other.

Ageing

- ROS-activity increases with age and exacerbates the process
- Glucocorticoid production and sensitivity increases with advancing age which in turn decreases skeletal hydration, thereby increase skeletal fragility by attenuating the volume of the bone vasculature and interstitial fluid.

These observations require a shift in thinking from an almost exclusive focus on oestrogen in the pathogenesis of osteoporosis to one involving age-related mechanisms intrinsic to bone and oxidative stress. Age-related changes in other organs and tissues, such as the adrenal gland as well as the ovaries are conributory.

293
Update in Medical Management of Osteoporosis

Ali H. Otom MD, Rehabilitation and Rheumatology (Jordan)

Osteoporosis is the most common bone disease in humans, and it represents a major public health problem. It is characterized by low bone mass, deterioration of bone tissue and disruption of bone architecture, compromised bone strength and an increase in the risk of fracture.
This is currently one of the leading causes of morbidity and mortality among elderly over the world. According to the World Health Organization (WHO), osteoporosis is the second leading health care problem after cardiovascular disease. Worldwide, one-third of women 60-70 years of age and two-thirds of women 80 years or older are estimated to have osteoporosis. Fractures occur because of qualitative and quantitative deterioration in the trabecular and cortical skeleton. The past two decades have seen major improvements in diagnostic technology and assessment facilities; it is now possible to detect the disease before fractures occur. This has been associated with the development of treatments of proven Efficacy.
A comprehensive management plan for osteoporosis includes evaluation of those at highest risk, exclusion of secondary causes of low bone mineral density, and selection of the appropriate treatment. Initiation of pharmacologic treatment for osteoporosis should be based on an assessment of ten-year absolute fracture risk using a validated fracture prediction tool that incorporates BMD and clinical risk factors. Early intervention can prevent osteoporosis in most people. For patients with established osteoporosis, medical intervention can halt its progression. If secondary osteoporosis is present, treatment for the primary disorder should be provided.
The agents currently available for osteoporosis treatment include bisphosphonates, the selective estrogen-receptor modulator (SERM), calcitonin, denosumab, and an anabolic agent, teriparatide (human recombinant PTH). All therapies should be given with calcium and vitamin D supplementation.

294
Surgical Treatment of Osteoporotic Fractures

Peter V. Giannoudis MD, Orthopedic Surgery (UK)

The major technical problem facing the surgeon when dealing with osteoporotic fractures is the difficulty in obtaining secure fixation of an implant to osteoporotic bone. There is less cortical and cancellous bone for the screw threads to gain purchase, so that the pull-out strength of implants is significantly reduced. Bone mineral density correlates linearly with the holding power of screws. The load transmitted at the bone-implant interface can often exceed the reduced strain tolerance of osteoporotic bone. This may result in microfracture, resorption of the bone, and loosening of the implant, with secondary failure of fixation. Consequently, the common mode of failure of internal fixation in osteoporotic bone is bone failure rather than implant breakage. Because of this, the operative treatment of metaphyseal fractures in the elderly is associated with an increased rate of complications; non-union and implant failure occur in 2% to 10% of fractures, malunion in 4% to 40% and re-operation in 3% to 23%.

The general principles of fracture management in osteoporotic bone require some changes in surgical technique in order to decrease the risk of failure at the bone-implant interface. These include the use of relative stability techniques such as intramedullary nails, bone impaction, buttress fixation, fixed-angle devices, bone augmentation and joint replacement.

Techniques of internal fixation which aim to provide absolute stability with lag screws are usually inappropriate in osteoporotic bone. Relative stability techniques are the most efficient at reducing strain at the bone-implant interface, as the implant is within the loadbearing axis of the bone.

The treatment of fractures is determined by three important factors; the soft tissues, the fracture pattern, and the patient. In the elderly, each of these factors may present particular problems. The soft tissues and skin may be thin because of atrophy or malnutrition thereby predisposing to degloving injuries. Arterial disease may result in ischaemic changes and poor healing, while venous hypertension produces oedema, ulcers and chronic skin changes. Fracture patterns are often complex because of the altered mechanical properties of bone, despite the low-energy nature of the injury. Patient factors are often complex in the elderly, because the majority of patients have medical comorbidities which require careful assessment.

Hall B Session 2
Orthopedic Surgery: Trauma, Tumor and Complications

295
Treatment of Recalcitrant Long Bone Non-Unions and Bone Defects: Application and Clinical Results of the Diamond Concept

Peter V. Giannoudis MD, Orthopedic Surgery (UK)

Background: Bone defects and long bone non-unions pose many challenges to the trauma surgeon. In this study we report our experience in the treatment of long bone non-unions and bone defects treated with the 'diamond concept'.

Patients and Methods: Between 2008-2011 patients who were treated in our institution with bone defect and/or atrophic long bone non-unions according to the diamond concept were eligible to participate. In cases where a long grade infection was suspected or active infection was diagnosed, radical debridement and a two stage procedure with temporarily stabilisation of the affected limb with an external fixator was carried out for eradication of the infection Exclusion criteria were hypertrophic and pathological fracture non-unions. Data collected included demographics, initial fracture pattern, method of stabilisation, mode of metal work failure, previous operations, time to revision of fixation, complications, time to union, and functional outcome. For bone defects the 'induced membrane' technique was applied. The revision strategy was based on the 'diamond concept': revision of fixation where indicated, application of a growth factor (BMP-7), a scaffold (composite graft (RIA and orthoss graft)) and concentrated mesenchymal stem cells harvested from iliac crest. The minimum follow up was 18 months (12-26).

Results: 30 patients (16 males) met the

inclusion criteria with a mean age of 48 years (20-72). 20 cases were long bone non-unions (13 femurs and 7 tibias) and 10 cases were bone defects (6 tibias and 4 femurs). The mean length of bone defect was 6cm (4-10cm). All bone defect cases were of septic origin. The mean time of previous re-operations was 2.6 (1-5). All cases underwent revisions of fixation (16 cases of broken metal work). In the non-union group, all patients united at a mean time of 5 months (3-7). The mean time of bone restoration with the induced membrane technique for the bone defect cases was 7.5 months (5-9). Post-operative complications included 2 superficial infections, one DVT, one PE and one blade plate failure (femoral non-union) requiring revision blade plate and anterior femoral plate. At the final follow up all patients were able to ambulate with painless full weight bearing.

Conclusion: For difficult recalcitrant long bone non-unions and bone defects the 'diamond concept' restores optimum mechanical and biological environment facilitating fracture healing and restoration of bone defects. This approach can minimise the risk of reoperations and should be considered in the surgeon's armamentarium in complex non-union cases and bone defects.

296
Correct Screw Positioning in MIS Trauma Stabilization

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Objectives: Minimal invasive spine surgery in trauma patients is challenging. A short operation time and a perfect positioning of pedicle screws is demanded. In this study we show for the first time, that the new VIPER®2 Minimally Invasive Pedicle Screw System allows both.

Methods: Between may 2009 and march 2011, 121 patients (131 fractures) with fractures between Th 3 and L 5 were treated with the VIPER®2 Minimally Invasive Pedicle Screw System. The most common fracture type was A3. We treated 52 females and 69 men, the mean age at operation time was 56.7 years. Postoperatively, all patients were examined using a CT scan and the screw-positions have been controlled.

Results: In 61 patients, ventral stabilization was additionally performed, in 33 patients, vertebroplasty or kyphoplasty was performed. 15 patients underwent laminectomy. Mean operation time was 80 minutes. No patient developed any new nervous debility postoperatively. 5 patients had neurological deficits preoperatively, in one patient we saw remission after surgery. 678 screws were placed. In the CT scan, we found 15 screws (2.2%) in suboptimal position. Because of no neurologic debility, no revision was performed because of the screw´s position. In one patient, septic revision without removal of the screws was performed.

Conclusion: With this System, spinal fractures can be treated in a short operation time with percutaneous stabilization and a correct positioning of the pedicle screws in almost 98%. In our study, no screw was so much malpositioned that revision surgery would have been necessary.

297
Pelvic Fracture Overview

Said Abdul Majeed MD (Jordan)

Pelvic fractures are life threatening injuries that deserve all attention & remain a permanent challenge

To all concerned. History of pelvic fractures management Is very interesting & impressive .It is a long march surprising us all the time with new ideas & achievements from the days when the " hammock was the best treatment orthopedic surgeons could offer for patients with unstable pelvic fractures (who could die on the hammock!) ,through the days of emergency external pelvic fixation(saving so many lives) & ending with the days of advanced definitive surgical treatment combining external & internal fixation using a huge armamentarium . Having so many methods of pelvic treatments, the need arose for a system to accurately assess the pelvic functions. This made me introduce a grading scoring system to assess pelvic functions . This was published in 1989 JBJS-B (71)

The " Majeed " system was used / quoted in about 200 published papers ,so far . An important (but much under-estimated) aspect In pelvic fractures management is the neurological deficits complicating these fractures .This will be briefly shown based on my paper published in 1992 in Journal of clinical Orthopedics & Related Research (USA).
The long impressive march in pelvic fractures management should not wane or stop.

298
Surgical Intervention of Pelvic & Acetabular Fractures

Hazem Al-Magableh MD (Jordan)
Surgical Intervention of Pelvic & Acetabular Fractures
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Objectives: Surgical management of pelvic(anterior ring and posterior ring fractures) as well as acetabular (anterior and posterior column and walls fractures) is recently considered to be the ideal solution to such injuries to overcome the well known complication of being bed ridden for a long period and to get the patients as early as possible to pre-injury status especially if the patients are demanding people .although few complication may happen with regard to surgery itself ,,, still advantages outweigh the risks or surgical complication compared to conservative management of such tremendous trauma to pelvis .
Methods: Thirty two cases of pelvic (anterior ring and posterior ring fractures) as well as acetabular (anterior and posterior column and walls fractures) over a period of three years were done for patients ages ranging from 21-58 yr old and mostly for demanding medium to high profile people, using anterior plus –minus posterior approaches, with no pre-operative or post-operative limb traction done .87 % of cases done within the ideal period of fixation
Results: 24 cases(75%) went well without complication , 4 cases(1 %) resulted in superficial infection. 4 cases(1%) had complication of post-traumatic hip arthritis. 2 cases of below knee DVT (0.06 %).
Conclusion: Surgical management still found to be golden solution for such injuries with good outcome if done in the golden period (5-7) days post-injury and immediately if the patient has any kind of hip dislocation.

299
Pelvic Ring and Acetabular Fractures

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Objectives: The purpose of this study was to review our experience in surgical treatment of patients with pelvic ring and acetabular fractures.
Methods: Analysis of 40 cases was carried out. Indications for operation were types B and C pelvic ring fractures and unstable fractures of the acetabulum. Among our patients for those with both columns fracture, SI joint disruption and comminuted fracture of iliac wing ORIF by reconstruction plate and screws through ilioinguinal extraperitonial approach was carried out along with additional percutaneous approach for fixation of SI joint by 2 screws. For patients with symphysis pubis disruption and anterior wall fracture ORIF by plates and screws was carried out. Patients with comminuted fracture of the posterior wall of the acetabulum, hip dislocation and intertrochanteric fracture of the femur open reduction for the femoral head with internal fixation by plate for the posterior wall and proximal femoral LCP plate for intertrochanteric fracture was carried out.
Results: 32 cases were reduced completely while 8 cases were reduced partially. After following up 1 to 6 years, 29 cases recovered completely,7 cases had satisfactory outcome and the other 4 cases had different degrees of symptoms with restriction of motion. Surgical treatment provided great fixation and stability.
Conclusion: Proper treatment of pelvic injuries requires careful assessment of the type of injury and the degree of stability of the pelvis.

300
Development of Orthopedic Tumor and Reconstruction Surgery over the Past Twenty Seven Years at King Hussein Medical Center

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Objectives: This paper will demonstrate the development of orthopedic oncology and reconstruction surgery at our center over the past twenty seven years through presenting cases diagnosed and treated in our center during each decade and over the past three decades and how it was going hand in hand with international development seen in leading centers world wide giving our centre the reputation it carries today between the middle eastern countries as referral centre for orthopedic tumors
Methods: We retrospectively analyzed the records for 100 patients that underwent either tumor resection with biological grafting and metal fixation or tumor resection with endoprosthesis implantation over the past three decades, a comparative study was performed between 57 patients from the first group and 43 patients from the second group regarding infection rates and functional out come
Results: There was a decreased infection rate among patients from the first group (5% of 57 patients) and a higher infection rate among patients from the second group (11% of 43 patients). There was also a better functional out come among patients with no infection from the second group compared to patients with no infection from the first group
Conclusion: It is better to have an infection free patient with decreased functional outcome than to have a patient with an infection that will end up with a decreased functional outcome anyway

301
Limb Salvage Surgery for Bone Tumors around the Knee, the Oncologic and Functional Outcome: King Hussein Medical Center Experience

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Objectives: It is a challenge to save the lower limb with a malignant or invasive benign bone tumor around the knee. We examined if the introduction of the up to date technology in our service improved the outcome and decreased the mortality and morbidity in those patient.
Methods: Retrospectively we analyzed 30 patients with bone tumors around the knee region treated with two different limb salvage procedures. The tumors included 25 primary malignancies, two metastatic lesions and three giant cell tumors which involved the distal femur in 24 patients and proximal tibia in six patients. The reconstruction procedures included 28 endoprosthesis replacements, two autogenous fibular grafts. With an average follow-up of 30 months.
Results: local recurrences occurred in two patients and systemic metastases in seven patients. Twelve patients died and 18 remained disease free. The five year survival rate of 25 patients with primary malignant bone tumors was 60%. The average Musculoskeletal Tumor Society (MSTS) functional score was 60% (range 20–100%) in all patients.
Conclusion: The introduction of up to date technology into our service improved the outcome and decreased the mortality and morbidity of our patients

302
Vertebral Osteomyelitis: Means of Diagnosis & Methods of Treatment

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Objectives: Vertebral osteomyelitis is an uncommon illness; adults are mostly affected. Our objective is to evaluate the short term outcome of oral versus

parenteral antimicrobials treatment for pyogenic (nontuberculous and non-brucellosis) vertebral osteomyelitis, and the best invasive diagnostic method yielding a microbiological diagnosis.

Methods: The medical records were reviewed in a retrospective study for patients ≤ 18 years old from five urban hospitals within Amman-Jordan; two teaching and three primary care hospitals, during the period between August 1999 to June 2007. Due to the small numbers in the arm of antimicrobials treatment, tstudents' test was used to assess inferences like 95% confidence interval and p-values for the difference among treatment arms.

Results: Seventy-four medical records were available, inpatients records 35 from two teaching hospitals, 39 records from three primary care hospitals. The orally treated patients showed lack of difference against the parenteral therapy group at the end of 6 weeks therapy ($p > 0.05$). Diagnostic methods tested for microbiological diagnosis were as follows; True cut biopsy, fine needle aspiration and limited laminectomy did not differ significantly in their microbiological diagnostic ability. Our data suggested lack of difference between oral and parenteral therapy groups at the end of six weeks treatment, but a questionable tendency (95% CI; -0.11 to 0.64, $p= 0.08$). The diagnostic ability of the three methods did not suggest significant differences ($p >0.05$), except for true cut biopsy versus fine needle aspiration where it showed tendency (95% CI; - 0.20 to 0.42, $p= 0.07$).

Conclusion: The key to successful management is the early diagnosis, and bone sampling for microbiological examination, allowing proper antimicrobial selection. A proper bone sampling method is important to evaluate, especially in the absence of surgical indication and the co-notation in some parts of the world that M. tuberculosis is the most -if not the sole- pathogen in vertebral osteomyelitis.

303
Treatment of Bone Defects using the Induced Membrane Technique

Peter V. Giannoudis MD, Orthopedic Surgery (UK)

Reconstruction of diaphyseal bone defects still represents a major clinical challenge. Several approaches are used with the common objective to regenerate bone loss and restore function. The methods most commonly used are the vascularised fibula autograft and the Ilizarov bone transfer technique. Recently, Masquelet proposed a procedure combining induced membranes and cancellous autografts. This concept is nowadays a well - established technique for the treatment of bone defects secondary to chronic osteomyelitis, tumour excision, traumatic bone loss and post-traumatic septic or aseptic non-unions. Successful regeneration of bone defects up to 25cm in length has been reported. Knowledge of the basic concept of the technique and its tips and tricks is important in order to reduce associated complications and increase its efficacy. The advantages of this method are that the induced membrane not only contains the bone graft and prevents its resorption at the early stages; but it also plays an important role in revascularisation and bone formation and consolidation throughout the regeneration process. The graft can be augment with cells, growth factors, allograft or other bone substitutes depending on local requirements. With this technique, the length of the defect is being mainly preserved and the soft tissue coverage is either adequate or is restored with soft tissue transfer.

Hall B Session 3
Orthopedic Surgery: Pediatrics & Arthroplasty

304
Orthopedic Recognition of Child Abuse: The Jordanian Experience

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There is a very thin line between punishment and physical abuse. Punishment is the use of physical force to inflict bodily pain (not injury) for the purpose of discipline. Abusive parents interpret the action of abuse as "punishment". Child abuse is the physical, sexual or emotional mistreatment or neglect of a child. The orthopaedist is primarily involved with physical abuse that involves the musculoskeletal system. Physical abuse: non-accidental injury of a

child that leaves marks, scars, bruises, or broken bones Epidemiology: >1 million children are victims of abuse or neglect in US each year (1,200/year die). Children of no socioeconomic class, demographic status, are immune from abuse. Failure to identify abuse in a child is risky: risk of recurrent abuse 30-50%, the risk of death 5-10%. Evaluation: Manifestations of physical abuse involve the entire child, a thorough history and a complete examination are essential. The diagnosis of child abuse is seldom easy to make and requires a careful consideration of sociobehavioral factors and clinical findings. Initial evaluation should include skeletal survey. In this presentation we presented our experience in this important issue.

305
Congenital Insensitivity to Pain and Anhidrosis (CIPA): Is there a Role for Orthopedic Surgeon

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Objectives: Congenital insensitivity to pain and anhidrosis(CIPA) is a rare condition which is associated with high mortality and morbidity, musculoskeletal problems is common in these patients with usually poor outcome.
Methods: 4 patients(age range from 4-9 years) diagnosed by pediatric department were included in this study, radiological screening was done for all of them, with swab culture for any skin lesion, surgical intervention was done according to the case, and patients were followed in the clinic regularly.
Results: All of these patients presented with infected wounds or ulcers, 3 patients had more than one malunited fracture, 3 had multiple charcot joint in foot, ankle or knees, one needed amputation to treat severely infected ulcer associated with septic knee, none of the nonunion fracture healed.
Conclusion: The musculoskeletal problems in CIPA patients is very difficult to treat and associated with disappointing results being aggressive to treat infections and treating other conditions as conservation as possible is the best to be done.

306
Functional Evaluation of Children with Obstetrical Brachial Plexus Palsy (OBPP) after Latissimus Dorsi Muscle Transfer and Subscapularis Muscle Release

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Objectives: To evaluate the functional outcome in children with obstetrical brachial plexus palsy after performing latissimus dorsi muscle transfer and subscapularis muscle release in children with obstetrical brachial plexus palsy.
Methods: this is a retrospective study between June 2008 and April 2012 on patients with obstetrical brachial plexus palsy who underwent latissimus dorsi muscle transfer and subscapularis muscle release, the active range of motion functional outcome was measured by the Mallet scoring system using pre-operative and post-operative videos and patients file for documentation and follow-up evaluation.
Results: patients involved in this study were 50 child with a ranging age between 18 months up to 13 years, 1:1 male to female ratio, the brachial plexus extent of injury were ranging from upper injury 79% to total palsy 21%, regarding the affected limb the right side involvement was 59.7% the left side 35.8% and bilateral involvement was 3%. Five active ranges of motion around the shoulder joint involved in the injury were analyzed with the following functional outcome improvement: 1. Global Abduction 46.6% 2. Global External Rotation 63% 3. Hand to mouth 57% 4. Hand to back 53.2% 5. Hand to head 48.9%
Conclusion: we found that this type of surgery is very helpful for patients with obstetrical brachial plexus palsy and the majority of patients and their families were satisfied by the achieved results.

307
Open Reduction though Medial Approach in Developmental Dysplasia of the Hip: Short Term Follow-Up

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Objective: To evaluate the outcome and the complications of using medial approach in open reduction hip in infants with Developmental Dysplasia of the Hip.
Method: This is a retrospective study over 24 months from June/2010 to June/2012, on infants operated in QRH and RJRJ under the age of two years with Developmental Dysplasia of the Hip. describing the procedure and the post operative protocol, results concerning the type of reduction, acetabular index. and complications.
Results: Forty children, 34 girls and 6 boys. Their mean age at operation was 13.2 months (8 to 24) and the mean follow-up was 19 months (3 to 24).
In 54 (90%) of 60 hips the reduction was concentric and the acetabular Index improved to be normal for the age with no complications. The younger age group the rapid remodeling process of the acetabulum to back to normal, the less the need for a secondary procedures later, with a low rate of complications. In cases of bilateral hip dislocation a bilateral medial open reduction has the advantage of avoiding multiple surgeries, prolonged immobilization and rehabilitation. Stiffness of the hip joint and subluxation are the major complications seen in few hips, which considered being poor outcome.
Conclusion: Open reduction using medial approach is a good and safe method of treatment for Developmental Dysplasia of the Hip below the age of 2 years, when the hip cannot be reduced or maintained in acceptable position by gentle manipulation. Follow-up clinical and radiographic evaluations until skeletal maturity are mandatory to accurately evaluate the treatment outcome.

308
Royal Medical Service Experience in using Taylor Spatial Frame

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Objectives: To evaluate the effectiveness of using taylor spatial frame in treating patient with complex limbs deformities and those with fracture complications.
Methods: This is a retrospective study for a different groups of patients who presented with congenital limb deformities, discrepancies, fractures malunion and nonunion. After frame application, baseline data obtained from postoperative radiographs. According to these data and by using a computer based program, each patient will have a detailed sheet of correction program that could be started few days postoperatively and completed at home after discharge. Frame applied till the program is completed, averaging 2-5 months. Following frame removal, each patient had rehabilitation according to his case.
Results: Between Feb. 2011 and July 2012, 19 patients involved in this study, 13 cases with lower limb shortening, 1 case with upper limb shortening,1 case of fracture nonunion, 1 case for knee arthrodesis and 3 cases for deformity correction. All were doing well with frame and show good compliance with the program except for 3 patients, two of them need ring exchange due to skin erosion and one with broken strut. At the conclusion of program, lengthening were achieved in the 13 patient, good union for tibial nonunion and good correction of deformity in 2 cases, the 3rd one need further procedure.
Conclusion: The Taylor Spatial Frame is a circular external fixator that is able to correct multiplanar deformities simultaneously or sequentially. This makes the fixator an excellent tool for correcting pediatric limb deformities, long bone trauma, lengthening, joint contractures & treating difficult cases of malunion & nonunion.

309
Periprosthetic Infections

Jihad Ajlouni MD (Jordan)

There have been improvement in total joint arthroplasty in terms of implant design, fixation,& control of infection.
The use of prophylactic antibiotics, body exhaust systems, laminar airflow, &other precautions had helped reduce the prevalence of clinically recognized periprosthetic infections from 10%in early years in which arthroplasty was performed to <1% in some series . Periprosthetic joint infection (PJI) is one of the most challenging and frequent complications following lower extremity (hip and knee) joint arthroplasty. However, there is no single accepted set of diagnostic criteria for PJI.
An infected total joint arthroplasty (TJA) is a failed procedure as sepsis compromises joint function, generates unnecessary pain, creates further morbidity from management procedures, interrupts the patient's lifestyle and annually places a significant financial burden on the national health care system . Although the proportion of TJA compromised by infection has decreased in the past 30 years, the annual number of procedures performed is steadily increasing, therefore preserving the large number of individuals afflicted with infection.
in the majority of cases (90%) the diagnosis can be made via the ESR/CRP and aspiration.
Doing everything possible to minimize modifiable risk factors for the development of deep Periprosthetic infection is imperative. Unfortunately, there is little in the literature to guide us on how to manage many of these issues. It is important that we use common sense and a practical approach and be vigilant in minimizing modifiable risk factors.
Successful sepsis management eradicates the pathogen from the joint, offers substantial pain relief and preserves joint motion. Various treatment options have been recommended, but two-stage reimplantation is the gold standard for managing a chronically infected TJA.

310
Vastus Lateralis Muscle Flap for Infected Hips after Resection Arthroplasty

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Objectives: We evaluated the potential of a vastus lateralis muscle flap in controlling infection after resection arthroplasty of the hip.
Methods: We retrospectively reviewed 119 patients with 120 chronic infections after resection arthroplasty treated with this procedure. The flap was fixed with Mitek anchors in the acetabular cavity.
Results: The mean duration of infection after resection before the muscle flap procedure was 6.5 months (2 to 13). The patients had previously undergone a mean of 4.9 operations (2 to 25). In all patients the infected cavity was the origin of the persistent infection. The mean follow-up was for 2.6 years (1.0 to 4.7).
Conclusion: No patient had recurrent infection post-operatively and all had an improvement in the pain and better quality of life. The Vastus lateralis muscle flap is a good salvage procedure in severe cases.

311
Elective Aseptic Orthopaedic Implant Removal - Increased Risk for Infection? A Study of 1545 Patients

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Objectives: The necessity of orthopaedic implant removal is in intense discussion, the risk of infection is present. Aim of this study was to find out parameters like time or duration of the procedure or even the surgeon responsible for an increased risk of infection after elective aseptic orthopaedic implant removal.
Methods: We reviewed 1545 cases of aseptic and elective orthopaedic implant removal between 2009 and 2011.

The patient´s demographic data, time and duration of operation, patient´s comorbidities and presence of infection in the first four weeks after implant removal was evaluated. Patients with signs of infection at time of the surgical procedure were excluded of this study.

Results: 579 women and 966 men could be identified who underwent removal procedure. Mean age was 42 years and mean duration of surgery was 48 minutes. 70 patients (4.5%) underwent elective aseptic implant removal after 6pm. 45 patients (2.9%) suffered from infection postoperatively, 5 patients (0,3%) who were operated at nighttime got infection. The parameters age, sex, BMI, time of operation, duration of the procedure and surgeon showed no statistical significant differences for the risk of postoperative infection.

Conclusion: Elective aseptic orthopaedic implant removal shows an increased risk of infection compared to other elective aseptic standard procedures. This might be because it is a revision procedure anyway. No risk factors could be identified that leads to change of regime in performing this procedure. Performing the surgical procedure at nighttime or performed by the intern, there is no additional increase of risk for infection.

312
The Accuracy of Robotic Surgery in Unilateral Medial Compartment Knee Replacement

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Objectives: Medial Uni compartment Knee Replacement Comprises 8-10% Of All Total Knee Arthroplasty;Despite the fact that 80% of all osteoarthritis of the knee starts in the medial compartment.This might be due to the exacting nature of the surgery in order to obtain good results.

Methods: The two parameters in unicompartmental knee replacements surgery are the bony cuts and ligament balancing. We examined the accuracy of these parameters using Robotics. Twenty patients had a RIO medial unicompartmental knee replacement and post operative CT scans to evaluate the accuracy of component placements.

Results: The results of this showed an error of less than 2 degrees in both the coronal and the sagittal planes. In 52 consequetive knees the planned ligamentous balancing was examined and the largest mean error was 0,625 mm in 30 degrees of flexion.

Conclusion: These results show that Robotics can significantly aid in placement and balancing of the medial knee compartment prosthesis. This will hopefully result in better outcomes and longevity in survivorship. Longer clinical results are needed.

313
Knee Arthroscopy under Local Anesthesia

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Objective: To evaluate the effectiveness, patient satisfaction and acceptability of knee arthroscopy under local anesthesia.

Patients and Methods: This is a prospective study which was accomplished at Queen Alia Military Hospital between 1st of Sept.2010 and 1st of Feb.2011. A total of 50 patients included in the study. Those who would need complex procedures as anterior cruciate ligament reconstruction or accompanied arthrotomy were excluded from the study. The arthroscopy was for therapeutic purposes of simple knee pathologies as meniscal tears, synovial pathologies, plicas, microfractering and diagnostic for some nondefinable knee complaints. We used 30 ml (20 ml intra-articular and 5 ml to each portal site) of 1% lidocaine in 1:100,000 adrenaline and 20 minutes after the injection the procedure started. No tourniquet was used in the procedures. Standard anterolateral and anteromedial portals used. Patients were evaluated during and after the procedure

and in the first visit to the clinic after the surgery for pain, satisfaction, acceptance of the procedure and the complications.

Pain during surgery was evaluated using the four- level score with0=no pain; 1=mild pain; 2=moderate pain; and 3=severe pain.

Results: 47 patients were male with an average age of 30years. The average duration of surgery was 30 min (15-60min.). Discomfort and pain were mainly felt during injecting the local anesthetic and was the most painful phase of the entire procedure. 2 cases (4%), had to be abandoned during the procedure due to pain and uncooperation and converted to general anesthesia. 2 patients required additional dose of local anesthesia and the procedure was completed. All patients were discharged soon after procedure completion.90% of patients experienced little to no pain during the surgery.
48 patients accepted the local anesthesia method and were ready to repeat the same method for the other knee if needed. No complication of the local anesthesia encountered.
Conclusion: Knee arthroscopy under local anesthesia is a safe, comfortable and known technique with many diagnostic and therapeutic procedures can be performed successfully.

Hall B Session 4
Orthopedic Surgery: Hand & Upper Limb

314
Advances in Hand and Wrist Arthroscopy
Alejandro Badia MD (USA)

Indications for small joint arthroscopy in the hand remain poorly understood. This is due to a paucity of papers discussing this technique in the literature, as well as inadequate hands on training in the pearls and pitfalls regarding this application within the commonly used "scope" of arthroscopy. Despite the fact that small joint arthroscopes have been available for over a decade, hand surgeons have been slow to adopt this technique within their treatment armamentarium for the treatment of both traumatic and degenerative conditions involving the thumb and the digital metacarpophalangeal joints.
A proposed arthroscopic classification for basal joint osteoarthritis provides additional clinical information and can direct further treatment depending on the stage of disease. This chapter will also review the brief history of trapeziometacarpal arthroscopy and provide insight as to how this technique can be incorporated into a treatment algorithm in managing this common affliction.
Metacarpophalangeal joint arthroscopy is even less commonly used, while traumatic and overuse injuries are frequently seen in the thumb, and present an ideal indication in certain scenarios. Painful conditions affecting the metacarpophalangeal joints of the fingers are less commonly seen, yet the small joint arthroscope presents a much clearer picture of the present pathology compared to other imaging techniques or even open, and potentially deleterious, surgery.
Wrist arthroscopy is better understood as this technique was developed in the late 80s, and is now a key part of most wrist specialists surgical armamentarium. While initially developed for diagnostic purposes, arthroscopy of the wrist is now vital for such common pathologies as triangular fibrocartilage tears (TFCC), carpal ligament injuries, ganglion cysts, articular injuries including distal radius fractures etc. Alerting colleagues about the availability of wrist arthroscopy is now supplanted by actually ensuring that hand surgeons are facile in these techniques and cadaveric courses are crucial to this end. Wrist arthroscopy can eliminate the perpetual "wrist sprain" diagnosis and actually allows us to visualize and even treat the underlying problem.
The application of this technology to the smaller joints will soon make the treating surgeon realize that a myriad of pathologies are readily visible and can augment treatment, as well as diagnosis. Similar to the wrist, small joint arthroscopy may one day supplant imaging techniques such as MRI or CT in establishing an accurate diagnosis.

315
Volar Dome Osteotomy for Correction of Madelung's Deformity: Experience at King Hussein Medical Center

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Objectives: To determine the surgical outcome of patients with the typical moderate to severe case of Madelung's deformity, who have a painful wrist not responsive to conservative treatment and/or a significant cosmetic deformity treated at King Hussein medical center.
Methods: Volar approach to the distal radius with a dome type of distal radial osteotomy combined with the release of Vickers' ligament and preservation of the distal ulna, were performed to all 15 female patients (19 Wrists) with mean age 15.3 years. The goals of surgery were to primarily obtain pain relief, correction of the cosmetic deformity, and to increase range of motion. Patients were assessed clinically and radiologically pre and post operatively.
Results: The esthetic appearance and grip strength were improved. Pain was eliminated and the incidence of complications was very low. Improved range of motion was observed in both flexion/extension and pronation/supination and absence of pain during daily activity. Radiographically, positioning of the distal radial articular surface and lunate subsidence were improved. Union was obtained after all osteotomies with no complications.
Conclusion: This technique produces good results for the treatment of the Madelung deformity, improving grip strength, range of movement, pain and the appearance of the wrist. However, longer follow-up is required to assess recurrence or possible long-term degenerative consequences. This procedure shows great promise and will be demonstrated in the lecture.

316
Athletic Injuries in the Hand and Wrist

Alejandro Badia MD (USA)

Athletic injuries in the hand and wrist are often misdiagnosed and undertreated for a variety of reasons. Chronic and overuse injuries often go untreated due to the athlete's reluctance to seek medical attention. This is because in many sports, the athlete can compensate with some of these injuries while this may be more difficult in weight bearing joints such as the knee and ankle. However, a more preventable issue may be the inaccurate diagnoses and inadequate treatment often afforded the hand and upper extremity in athletes. This is where the physician and ancillary health specialist can improve their management of these challenging and often obscure injuries. In many instances, the hand surgeon should be involved at an early stage of treatment and to ensure an accurate diagnosis.
The common injuries in the hand and wrist are often sports specific and often aptly named. For example, jersey finger is an avulsion of the flexor profundus tendon that occurs when the athlete grabs the opponents jersey as they pull away. This leads to a sudden and resisted hyperextension force that avulses the tendon at its insertion site. A strong surgical repair is necessary followed by appropriate therapy to maximize the passive range of motion and later the active flexion. Subsequent strengthening is of obvious particular importance in the competitive athlete. Blunt injuries can occur to the extensor mechanism as well and the wide range of complex joints in the hand and wrist.
Mallet finger is a rupture of the extensor tendon on the distal (tip) phalanx of the finger. Early diagnosis can allow simple treatment in a cast, although bony injuries often require a minor procedure of pinning to allow optimal result.
Boutonniere deformity can result from an untreated "central slip" injury where the extensor tendon detaches from the critical second joint of the finger.
The wrist is a common area of injury that can involve cartilage (TFCC), ligaments and capsule, as well as bony injury such as the distal radius or scaphoid bone.

Small joint arthroscopy now gives us a more accurate method to diagnose many of these subtle injuries and of course provide treatment. Wrist arthroscopy indications have been well worked out, but newer techniques using metacarpophalangeal and thumb carpometacarpal arthroscopy are evolving. This includes better methods of fixation, radiofrequency probes to ablate and shrink tissue, and improved post-op methods of rehabilitation including splinting techniques and passive range of motion protocols.
Hand and wrist injuries should be evaluated by the appropriate subspecialist as this will not only avoid misdiagnosis, but will also optimize the treatment and allow faster return to work and sport with the maximal function possible.

317
Capitate Shortening in the Treatment of Kienböck's Disease

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Objectives: Capitate shortening with capitate-hamate fusion is a procedure for revascularization of the lunate. The procedure is designed for patients with early Kienböck's disease who have relatively minor architectural changes in the aseptic lunate, no arthritic changes and no ulnar-minus variance. Objective: To determine the clinical outcome of patients with stage I to IIIA of Kienbock's disease with ulnar neutral variance treated by Capitate shortening combined with capitate-hamate fusion.
Methods: Retrospective study was performed in Royal Jordanian Rehabilitation Center. This study included 22 patients who had a mild form of Kienbock's disease (stage I to IIIA according to the classification of Lichtman). A Capitate shortening osteotomy was performed through a dorsal medial approach and fixed with a Herbert screw and the capitate-hamate fusion fixed with 2 K-wires.
Results: The mean follow-up was 14 months (range, 11-20 months). All patients demonstrated partial revascularization of the lunate and the mean revascularization time was 6.3 months (range, 4-9 mo), which was interpreted as the beginning of the revascularization process. The pain has decreased constantly. Motion in flexion-extension has an increase of more than 55°, radial and ulnar deviation of more than 20° and grip strength of more than 40%.
Conclusion: Capitate shortening osteotomy is a reliable and efficient technique to induce the revascularization process in stage I to IIIA of Kienböck's disease with neutral ulnar variance.

318
Endoscopic Carpal and Cubital Tunnel surgery

Alejandro Badia MD (USA)

The treatment for Carpal Tunnel Syndrome is often directed at decreasing the inflammation of the tendons. Injections of steroids such as cortisone can lead to a decrease in the swelling. This will allow the median nerve more room in the carpal tunnel and relieve the pain.
The most common treatment without the use of drugs or injections is a night splint. The splint does not allow the patient to flex their wrist at night which often occurs during dreaming. This relieves some of the pressure within the canal. Symptoms are magnified at night because the position of the hand is at the same level of the heart while lying down leading to pooling of the fluid in the soft tissues within the canal.
If the compression is severe enough and the patient does not respond to conservative treatment, the next step would be a minor procedure. Surgery for Carpal Tunnel Syndrome is also misunderstood by the public as well as many physicians. Rumors abound as to the final outcome after these procedures. People think they can lose function of their hand if they have surgery. The truth is that surgery is extremely successful.
This procedure actually entails a very simple concept. A division is made in the ligament which serves as the roof of the carpal tunnel. This increases the space in the carpal tunnel allowing the median nerve to function better.
The most recent breakthrough in treatment of Carpal Tunnel Syndrome, which I have

been performing for over 15 years, is called endoscopic release. In this procedure, an incision of less than one centimeter is made in the crease of the wrist and an endoscopic, a tiny camera, is inserted. This allows the surgeon to literally see the inside of the hand and make the division of the ligament without a large, open incision. This allows for a rapid, minimally painful recovery, where nearly full use of the hand is regained immediately after this simple outpatient procedure.

Cubital tunnel syndrome is a similar entity, but is a compression neuropathy involving the ulnar nerve at the medial aspect of the elbow. Traditional surgery entails open release of the nerve, frequently accompanied by anterior transposition, or physically moving the nerve to a position where there is minimal stress on the nerve to allow nerve function recovery and alleviate symptoms. Complications are fairly common as the nerve is very sensitive, and we are now doing the release endoscopically, a similar concept as mentioned for the median nerve at the wrist. Early results of a multi-center prospective clinical study that I am involved in, shows that the recovery is faster, less painful and with minimal complicaionsand high patient satisfaction. Surgeon use of the new technique does require certification via cadaveric exercises.

Common compression neuropathies of the upper limb can now be almost solely treated with endoscopic minimally invasive means and this advance needs to be conveyed to patient and referring physicians alike.

319
Current Concept in the Management of Peripheral Nerve Injuries

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Objectives: To evaluate the results of management of peripheral nerve injuries in patients referred to pediatric orthopedic clinic

Methods: retrospective study between Oct. 2010 to June 2012, 20 cases of peripheral nerve injuries managed by exploration followed by direct repair or nerve graft. different peripheral nerves injuries showed different results in terms of function, muscle transfer was done to help some cases.

Results: excellent results seen in pediatric age group in comparison with adult age group. if the repair is not helpful a muscle transfer may help some patients.

Conclusion: most patients with peripheral nerve injury should be assessed and managed by a specialized surgeon in this type of injury, direct nerve repair give the best results, nerve graft should give good results, muscle transfer is the last dynamic option to such injuries.

Hall C Session 1
Cardiac & Vascular Surgery

320
A Pilot, Randomised Trial of Conventional Prolene Anastomosis Versus U Clip Anastomosis for Arteriovenous Fistula.

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Objectives: To assess a novel, new, nitinol clip for performing arteriovenous anastomoses.

Methods: A pilot, randomised, blinded trial. Clinicaltrials.gov identifier - NCT00829153. Set in a Tertiary level teaching hospital. Subjects – 31 Patients undergoing autologous arteriovenous fistulas for renal access where the inflow artery had a lumen diameter of 2mm or more and the outflow vein had a diameter of 3mm or more. Interventions – At the time of operative preparation and exposure of the vessels, patients were randomised to a conventional anastomosis with 6/0 Prolene or to U Clip anastomosis. The primary outcome measure was three successful dialysis treatments using the fistula.

Results: The primary outcome was achieved in 8/19 (42%) of the Prolene group and 7/12 (58%) in the U Clip group (p = 0.379 Chi squared test Pearson uncorrected).

Conclusion: This pilot study has shown no advantage to the U Clip anastomotic technique when compared to the traditional continuous Prolene technique.

321
Eleven Years Experience with the use of Contegra®

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Objectives: The implantation of the Bovine Jugular Vein (Contegra) in the repair of many congenital heart defects (CHD) had gained a world wild acceptance. We report our experience in using it over eleven years.
Methods: During the period from February 2000- December 2011, we implanted the Contegra in 268 patients with different congenital heart defects at the position ventricle-Pulmonary artery (RV/LV-PA). There were 178 males and 90 females in an age ranging between 3 months- 33 years mean of 5.6 yrs. Echocardiography was performed postoperatively at 3days, 3months, 6months then every year looking for pressure gradient across the valve, regurgitation and calcification The primary endpoints of operative mortality and morbidity and secondary endpoints of follow-up haemodynamic performance including severe stenosis, regurgitation and need for reintervention are presented.
Results: The follow up of patients were 100% in 1 yr, 98% in 2 yrs; 82% in 3yrs and 57% in 4 yrs, 40% in 5yrs, 35% in 6 yrs, 20% continued to show up from year 7 to year 11. The performance of the conduit was as follow: Unchanged pressure gradient or < 15 mmHg over 2yrs in 98%, PG 15 – 25 mmHg over 3yrs in 25%, PG 25 -35mmHg over 4yrs in 18%, PG 35 – 45mmHg over 5yrs in 14% and by the end of 11 yrs 10% of pts had PG >55 mmHg and were scheduled for redo surgery. The rest of the patients were having minor changes in the pressure gradients over variable periods of follow up. There were no conduit related adverse events, there were 32 deaths (22 early and 10 late) not related to conduit implantation.
Conclusion: The Contegra conduit is s a reliable extra-cardiac conduit for primary and redo- RVOT reconstruction over eleven years of follow up

322
A Randomised Trial of Betadine Wound Irrigation in Varicose Veins Surgery

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Objectives: A meta-analysis suggested that povidone iodine application to wounds can reduce the incidence of surgical site infection (SSI). The aim of this study was to assess povidone iodine in the groin wounds of patients undergoing primary varicose vein surgery.
Methods: A prospective, randomised, double blind, controlled study in patients undergoing primary varicose veins surgery. Patients were randomised to a povidone iodine (Betadine) soaked surgical gauze placed in the wound or a saline soaked gauze placed in the wound. Patients undergoing bilateral surgery had povidone iodine in one wound and saline in the other. Patients were then followed up weekly for 6 weeks by a specialist wound nurse to observe for signs of wound infection.
Results: 66 legs in 50 patients were recruited. 36 groin wounds were randomised to saline and 30 to Betadine. There was no difference between the groups with respect to age (49 vs.55 years), maleness (20 vs.15), weight (92 vs. 87 kg), BMI (40 vs. 30), number with active ulcers (3 vs. 3) and right leg operations (12 vs.17). There was a reduced incidence of groin wound infections in those randomised to Betadine (3 vs.1) but this was not statistically significant ($p = 0.4$) using chi squared test.
Conclusion: Although there may be a trend towards a lower wound infection rate when povidone iodine is use in surgical wounds, this is not significant for varicose veins surgery. The advent of endovenous procedures will limit future similar studies

323
Waterpipe Smoking: New Trend in Peripheral Vascular Disease Patients

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Objectives: The waterpipe is an ancient instrument used to smoke specially made tobacco by heating it with burning charcoal. We aim to assess the degree of spread of this habit amongst peripheral vascular disease patients in Jordan.
Methods: Direct in depth interviews were conducted on 90 (87 males, 3 females) smokers with peripheral vascular disease, referred to our unit over a two- month period starting mid September 2011. All patients had symptomatic PVD and ABPI of 0.8 or less. Data regarding smoking habits, risk factors for PVD, and indication for intervention was collected.
Results: Presenting complaints were: intermittent claudication 47(52 %), rest pain 25 (28%), tissue loss 18(20%). Eighteen (20 %) predominantly smoked waterpipe, 55 (58%) patients smoked cigarettes, 8 (9%) cigars, 4 (4%) pipe, 3 (3%) rolled tobacco. Six patients (7%) had premature atherosclerosis with age range 27 to 40 years, while the rest had a median age of 62 (range 41-82). Age range distribution of starting smoking: 11-20 years: 77 (86%), 21-30 years: 9 (10%), >30 years: 4 (4%) Waterpipe smokers tended to start at an earlier age (median 18, range 16-26) and form a higher percentage of premature atheroscelosis (50%). Fourteen (16%) patients smoked at least one waterpipe daily with three (3%) of these smoking at least two waterpipes a day. The other 4 (4%) smoked at least 3 waterpipes a week.
Conclusion: Waterpipe smoking seems to be on the rise in the Middle East. It is a significant risk factor for peripheral vascular disease especially in the young.

324
Is Heparin Required for Lower Limb Endovascular Intervention?

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Objectives: To compare immediate outcomes for patients who receive and those who do not receive heparin during lower limb endovascular intervention.
Methods: Retrospective case study of 315 procedures for lower limb peripheral arterial occlusive disease. Patient records were interrogated for bleeding or thrombotic/embolic complications during or immediately after endovascular intervention for peripheral arterial occlusive disease.
Results: Of the 209 cases who received heparin, 18 (8.6%) suffered an access site bleed compared to one patient (1%) in the 106 patients who did not receive heparin ($p = 0.007$). There were 5 embolic/thrombotic complications in the patients who received heparin (2%) compared to three in those that did not receive heparin (3%) ($p = 0.8$). In 176 cases, a closure or compression device was used (Starclose n = 103, Angioseal n = 37, Fem stop n = 35, Proglide n = 1) of which there were 3 access bleeding complications (2%). 139 cases did not have a closure or compression device associated with 15 (11%) access bleeding complications ($p = 0.002$).
Conclusion: In this study heparin use and non use of a closure or compression device was associated with an increased risk of access site bleeding. Embolic/thrombotic complications were uncommon.

325
Anomalous Origin of the Coronary Arteries: The Mayo Clinic Experience

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Objectives: Anomalous origin of the coronary arteries is an uncommon, but important cause of chest pain, cardiac ischemia and sudden cardiac arrest. The study aim is to analyze the surgical

treatment outcomes for anomalous origin of the coronary arteries

Methods: The records of patients, who underwent surgical correction of anomalous origin of the coronary arteries in the period between 1992 and 2008, were retrospectively reviewed. They were 36 patients; Surgical techniques included coronary unroofing in 22, bypass grafting in 14 patients. The mean follow up period was 1.1 years.

Results: The median age was 47 years at the time of surgery. Anomalous right coronary artery arising from the left sinus was present in 21(58%), while anomalous origin of the left main coronary artery was seen in 13(36%) and the remainder 2(5%) patients had anomalous origin of the left anterior descending coronary artery from the right aortic sinus as demonstrated by chest computed tomography. Most of the patients 34(95%) had an intramural course of the proximal coronary arteries. 5(14%) had previous myocardial infarctions. No early mortality was documented during the hospitalization period; one patient had late death due to subdural hematoma, and only one patient had recurrent chest pain.

Conclusion: Surgical management of anomalous origin of the coronary arteries can be safely and effectively performed with good outcomes

326
Trans-Rectus Transverse Mini Laparotomy Aortic Surgery: Report of the First 6 Cases

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Objectives: To report our experience with performance of aortic surgery through a mini laparatomy transverse trans- rectus incision.

Methods: This is a retrospective study of 6 patients (5 males, 1 female) who had surgery for an infra- renal abdominal aortic pathology during the period March to June 2012 in our unit using this approach. The indications were occlusive disease (claudication 1, critical ischemia 4) in 5 and aortic aneurysm in one. The procedure was aorto- bifemoral bypass in 4 patients , aorto-biiliac in one and localized aortic endarterectomy in one. All aortic procedures were done through an 8-10 centimeter transverse (supraumilical 4, infraumbilical 2) trans rectus abdominal incision. Small transverse groin incisions were used for femoral exposures. In two patients the procedure was done under high epidural anesthesia only.

Results: The median age of our cohort was 54 years (range 49-68). All patients were successfully revascularised with no mortality or major morbidity during the study period. Mean operative time was 105 (range 92-134) minutes. In two cases (aortic aneurysm 1, total aortic occlusion 1) the incision was extended further to the classical transverse abdominal laparatomy. In all cases oral intake and patient mobilization was started within 24 hours. The mean length of hospital stay was 4.5 days (range 3-6). All patients spent the first night in our high dependency unit and were transferred next morning to normal ward.

Conclusion: Mini-lapartomy through a transverse abdominal incision is safe and technically feasible for aortic surgery. It seems to offer shorter hospital stay and early return to normal functions.

327
Results of Tricuspid Valve Repair at Queen Alia Heart Institute: De-Vaga Repair vs. Ring Annuloplasty, Which is Better?

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Objectives: Retrospective study to assess the echo results of different types of tricuspid valve surgery at queen alia heart institute during 2011

Methods: From January 2011 tell the end of December 2011 we did 83 tricuspid valve surgery as part of other cardiac procedure, 81 patient underwent tricuspid valve repair, 2 patient tricuspid valve replacement with biological valve. all of them underwent other cardiac

procedure .those associated with mitral valve surgery were 79 patients (95.2%), 45.6% mitral stenosis ,54.4% mitral regurgitation. Pathology of tricuspid valve was regurgitation in all cases .diagnosis done by transthoracic and transesophygeal echocardiogram De-vaga repair was done in 48 patients (59.3%), tricuspid valve ring annuloplasty done in 33 patients (40.7%) in which rigid ring used in 22 cases and flexible ring in the other 12 cases. mean follow up was 5 months, the follow up was based on echo grading of tricuspid regurgitation, the patients were followed by echo in 4 periods intervals, first period was during the hospital stay, the second was after 2 weeks, the third was after 2 months, and the fourth was after 5 months of operation.

Results: Total number of patients was 83, 46 of them were female(55.4%) ,mean age was 58.4 year in hospital mortality was 4.8%, Regurgitation decreased in 90.1% of patients in the first period ,92.6% in the second ,92.6 % in the third, and in 86.4% in the fourth period .for those who underwent De-vaga repair the decrease in regurgitation was 89.6%,.89.6%,89.6% and 85.4% respectively .and in those who underwent tricuspid ring annuloplasty the decrease was90.1%,96.9%.96.9% and 87.5% respectively , when using rigid ring the decrease was 100%.No tricuspid valve stenosis were seen. The replaced valves were both competent.

Conclusion: the tricuspid regurgitation should be assessed properly by echo preoperatively. We have good results in both methods of tricuspid valve repair. De-vaga repair is good option for patient with mild to moderate regurgitation but ring annuloplasty is indicated whenever there is sever regurgitation in which both rigid and flexible ring can be used but it needs proper sizing intraoperatively

Hall C Session 2
Cardiology

328
Retrograde Techniques in Chronic Total Occlusion Recanalization

Alfredo Galassi MD (Italy)

329
Essentials from the Euro-CTO Club: Update and Preview

Alfredo Galassi MD (Italy)

330
A Step-by-Step Case Based Tutorial of the Spectrum of Dual Stent Bifurcation Techniques, and How to Choose

Alfredo Galassi MD (Italy)

331
Antegrade Techniques for Recanalizing Chronic Total Coronary Occlusions at Queen Alia Heart Institute

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Objectives: to analyze all antegrade CTO procedures performed by single operator at Queen Alia Heart Institute throughout the two consecutive years of 2010 and 2011.

Methods: A prospective cohort, single center, single operator study comprising all consecutive procedures undertaken for CTOs between 1 January 2010 and 31 December 2011. The total number of patients was 246 (110 F and 136 M) with mean age of 58.9 years.

Results: The overall frequency of success in CTO revascularization is 67.1%. Success rates increased from 51.3% in 2010 to 81.3% in 2011. Penetration, side branch balloon anchoring technique and STAR technique were more prevalent in 2011. All CTOs were tackled using one of these wire techniques single wire drilling 20%, single wire drilling + parallel 16 %, single wire penetration 35 %, penetration + parallel 16 %, side branch 9 %, side branch balloon anchoring technique 3 % and STAR technique in 1 % of cases. The frequency of post-procedural events and

death were 3.7% and 0% respectively, while at 6 months frequency of MACE and death was 9.3% and 0.8% respectively.
Conclusion: All antegrade PCIs on CTOs are safe at our tertiary referral centre with an acceptable success rate that improved with the acquisition of CTO dedicated equipments and gaining of experience along two consecutive years. Performing less ad-hocs, providing extra time allowance for operators, using more specialized devices, enhancing second attempts and performing retrograde techniques may increase the success rates further more in the future.

332
Experience with Transradial Sheathless Guiding Catheters at Queen Alia Heart Institute Initial Experience in Jordan

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Objectives: to describe the use of sheathless guiding catheters in performing complex coronary artery percutaneous interventions via transradial approach. The use of such catheters had never been described in Jordan previously.
Methods: A prospective cohort study on a total of five patients (4 M, 1 F) with mean age of 65.8 years and BMI of 22.6, who underwent complex coronary percutaneous interventions using 7.5 sheathless guiding catheters at Queen Alia Heart Institute. Selection of patients among the whole transradial population performed by the group was done at the operator's discretion when the radial artery diameter was felt too small to accommodate standard 7 French sheath .
Results: Two patients underwent mini-crush stenting of 1, 1, 1 Medina LAD/D1 lesions. The third patient underwent unprotected bifurcation left main stenting using TAP technique. The fourth patient underwent draw back T stenting of 0, 0, 1 Medina ostial obtuse marginal one lesion using anchoring balloon in the native circumflex artery. The last patient underwent successful recanalization of a chronically occluded mid LAD using penetration with parallel wire techniques aided by side branch balloon support technique.
Conclusion: Sheathless guiding catheters allowed complex interventions requiring large bore catheters to be performed transradially . Therefore these guides are now considered an essential component among the transradial armamentarium in our cath lab.

Hall C Session 3
Cardiology

333
Non-Cardiac Surgery after Stenting: When it will be Appropriate?

Wael Husami MD (USA)

Major adverse cardiovascular events (MACE) and/or hemorrhagic complications have been a concern since the introduction of coronary stenting in 1986. Poor clinical outcomes usually occur despite successful restoration of blood flow. The combined end point of death and non-fatal MI exceed 70%. Risk factors for acute and subacute stent thrombosis are multifactorial in origin such as stent, patient and/or operator factors. Surgery increase risk of perioperative stent thrombosis by increasing the plasma procoagulant activity which could increase the tendency for thrombosis. For patients who undergo successful coronary intervention with or without stent placement before planned noncardiac surgery, there is uncertainty regarding how much time should pass before the non-cardiac procedure is performed, primarily because of the fear of stent thrombosis.
The published current ACC/AHA PCI and CABG guidelines considered coronary revascularization before noncardiac surgery as Class I indication in patients with stable angina who have significant left main artery disease, 3-vessel disease or have 2-vessel disease with significant proximal LAD stenosis and either EF less than 0.50 as well as in patient with acute myocardial infarction. In the other hand, A 2007 AHA/ACC/SCAI/ACS/ADA science advisory report concludes that premature discontinuation of dual-

antiplatelet therapy markedly increases the risk of catastrophic stent thrombosis and death or MI; for that reason elective procedures for which there is significant risk of perioperative or postoperative bleeding should be deferred until patients have completed an appropriate course of thienopyridine therapy (12 months after DES implantation if they are not at high risk of bleeding and a minimum of 1 month for bare-metal stent implantation) by which time stents are generally endothelialized and antiplatelet therapy completed.
The purpose of this presentation, Dr Wael Al-Husami will provide a comprehensive review of the value of percutaneous coronary intervention prior to surgery if any and to review the current updated guidelines and treatment strategies for patients who has CAD and required non-cardiac surgery.

334
A Prospective Cohort Study on the Use of Transradial Approach at Queen Alia Heart Institute

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Objectives: To report our experience with Transradial approach (TRA) for coronary angiography (CA) as compared with TFA (transfemoral approach) at Queen Alia Heart Institute (QAHI). Nothing is known or was published about TRA in Jordan and its surrounding countries.
Methods: This is a prospective, single center, single operator (A.O) case control trial that was performed between 1/1/2009 and 31/12/2010. The number of enrolled patients was 420 patients (87% males) who were referred for CA to rule out coronary artery disease (CAD). Inclusion criteria include patients at high bleeding risk, obese , those with peripheral vascular disease, patient request for TRA , need for same-day patient discharge and lastly patients who were included to allow for a minimum of 420 patients to be enrolled in the trial.
Results: The overall frequency of TRA in our center was 12.2 %. For TRA group, success rate was 93.3% .Total conversion rate to different entry sites was 6.7 %(14/210 pts) with no access site bleeding, perforation or hand ischemia. Most common complications were hand numbness and forearm pain . Asymptomatic loss of radial pulse was seen in <1%. Longer access, procedural times as well as fluoroscopy times were recorded versus TFA. Success rate was achieved in 100% of the TFA group but with significantly higher bleeding complications.
Conclusion: TRA is an effective alternative to femoral catheterization at QAHI . TRA was safer, better tolerated, with fewer post-procedural events than TFA, at the expense of lower success rates.

335
Trans-Catheter Sympathetic Renal Denervation: Early Experience at Queen Alia Heart Institute and Brief Review

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Objectives: To give an insight into transcatheter sympathetic renal denervation "RSDN" and detailed description of our initial experience on six patients who received the aforementioned therapy in treating resistant hypertension "RH". during the period from October 2011 till Jan 2012. Queen Alia Heart Institute at Royal Medical Services"RMS" in Jordan has been the first medical institution in the Middle East North Africa (MENA) region to adopt the technology.
Methods: A total of six patients (2 males , 4 females) received the mentioned transcatheter therapy with mean age: 41.8 ±10.8 yrs , SBP 187.5 ± 19.2 mmHg (170-220) , DBP 115 ± 16.6 mmHg(100-140) , duration 6.6 ± 4.6 yrs (0.5-13 yrs). Number of drugs 6.5±2.9 (4-11). Procedures were performed using "the SimplicityTM catheter- Medtronic Company".
Results: All 6 cases were performed successfully with no significant intra or post-procedural complications. No renal artery perforation or dissections were

reported. Mean drop in systolic BP was 46.3 ± 16.3 mmHg (20-60), and in DBP was 21.2 ± 11.2 (5-30 mmHg) at 21 days respectively. At 6 month follow-up attained in 4/6 patients, B/P readings above 210/120 were reported again in 2 patients.
Conclusion: RSDN is both safe and effective in treating resistant hypertension at the short-term taking the overall results of our cohort. However the low efficacy noticed at 6 months F/U in those with baseline BP > 200/120 represents a huge clinical and therapeutic dilemma.

336
Venous Thromboembolism Management & The Role of Endovascular Therapy

Wael Husami MD (USA)

The annual incidence of venous thromboembolism is approximately 0.1 percent; the rate increases to 1 percent among those who are at least 60 years old. The primary objectives for the treatment of deep venous thrombosis (DVT) are to prevent pulmonary embolism (PE), reduce morbidity, and prevent or minimize the risk of developing the postthrombotic syndrome (PTS). The risk of pulmonary embolism (either symptomatic or asymptomatic) with proximal-vein thrombosis is approximately 50 percent.

Anticoagulation is still standard of care for deep venous thromboembolism: however, this treatment option would not rapidly relieved the clot burden or clinical symptoms. Catheter based percutaneous mechanical thrombectomy (PMT) and thrombolysis is consider a new quicker treatment option to facilitates thrombus extraction, and to prevent future recurrent DVT and it is complications including recurrent ipsilateral DVT, Pulmonary Embolism, chronic pain, swelling, heaviness and post-thrombotic syndrome, chronic venous insufficiency, and improved quality of life.

Dr Al-Husami will highlight in his presentation the Deep-Vein Thrombosis Management, and the role of the Endovascular Therapy and the Guidelines for the treatment of deep-vein thrombosis which have been published by the American College of Chest Physicians and the American Heart Association.

337
Vasculo-Behcet and the Role of Coronary Grafted Stents

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Objectives: To describe the successful use of a grafted stent in sealing a vasculitic coronary aneurysm involving the proximal part of right coronary artery in the setting of acute ST-elevation Myocardial infarction in Behcet disease. To our knowledge, this is the first case in literature to describe the use of grafted stents in such a setting.
Methods: A 33 year old male Jordanian patient presenting with acute inferior ST-elevation myocardial infarction, while having a past history of both recurrent bilateral deep vein thrombosis and superior sagittal sinus thrombosis. A large proximal coronary aneurysm in the proximal part of right coronary artery was sealed with one grafted stent followed by another drug-eluting stent to cover an adjacent distal atherosclerotic disease.
Results: The procedural outcome was excellent with no periprocedural complications. Coronary computed tomographic angiography revealed complete obliteration of the aneurysm with no endoleak. Follow up conventional coronary angiography at 6 months for recurrent atypical chest pain revealed complete occlusion of right coronary artery just at the site of previous total occlusion.
Conclusion: The role of grafted stents in sealing coronary aneurysms in Behcet disease in the setting of acute ST-elevation Myocardial infarction is feasible and safe. However the long term patency of such stents is low as described in other pathologies.

Hall C Session 4
Endocrine

338
You and Your Body: Body Clocks, Diabetes and Heart Disease

Eleanor M Scott MD (UK)

Life on earth is governed by the continuous 24-hour cycle of light and dark. Organisms have adapted to this environment with clear circadian rhythms in their physiology and metabolism enabling them to anticipate predictable environmental fluctuations over the day and to optimise the timing of relevant biological processes to this cycle. It is of considerable interest that the normal diurnal variation in these processes is lost in the presence of insulin resistance, obesity and diabetes. It is widely appreciated that disruption of an individual's normal relationship to the 24hour day by shift work schedules or disrupted sleep contributes to an increased prevalence of metabolic risk factors and an increased risk of obesity, diabetes and cardiovascular disease. Circadian rhythms have recently been found to be regulated by molecular clocks and current evidence suggests that interactions between the central and peripheral molecular clocks are important in metabolic, adipocyte and vascular function. Taken together this strongly suggests that disruption of normal diurnal physiological rhythms is of considerable importance in the pathophysiology of cardiovascular disease and diabetes.

339
Poly Cystic Ovarian Syndrome: Relevance to a Physician

Paul E. Jennings MD (UK)

Polycystic ovarian syndrome is a common condition which should no longer be considered as a primary gynaecological disorder resulting in amenorrhoea, infertility and hirsutism. The diagnosis is made by a combination of clinical and biochemical features including ovarian/ menstrual dysfunction, clinical/biochemical evidence of increased androgens and ultrasonic appearances of the ovaries. Added to this should be the features of insulin resistance and the metabolic syndrome.

Insulin resistance is a universal feature of PCOS, so that up to 50% of obese women with PCOS will develop impaired glucose tolerance or diabetes by the age of 30. Women with PCOS have been shown to have premature atherosclerosis and these women have a higher relative risk for coronary heart disease and myocardial infarction than women with normal menstrual cycles. However in the majority of cases, identification of at risk patients can be made easily clinically.

There are well evidenced treatment approaches that could be followed to improve insulin sensitivity in these individuals without resorting to pharmacological agents, although there is a role for insulin sensitizing agents and anti-obesity treatments. These approaches will be discussed with the expectation that actively identifying and managing these women will promote not only an improvement in health expectations for each individual with PCOS but also potentially in their off-spring.

340
Pituitary Metastasis of Follicular Thyroid Carcinoma, Case Report and Review of the Literature

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Objectives: Metastasis to the sella turcica and pituitary gland is rare and review of the literature revealed only 12 cases of metastatic thyroid carcinoma involving this site. A 49 year old woman presented with progressive visual impairment and headache. Past history includes 2 operations for benign multinodular goiter. Three months before presentation, she underwent subtotal thyroidectomy for large multinodular goiter that was confirmed to be follicular thyroid carcinoma .Brain MRI showed 5.5X4cm mixed intensity lobulated sellar and suprasellar mass lesion containing areas of necrosis and sub acute blood with some encasement of the cavernous part of both(internal carotid artery) ICAs.

Methods: Description of index case and all other cases that were reported in the literature
Results: The patient underwent transsphenoidal removal of the lesion to alleviate visual impairment. The histopatholgical features of the pituitary tumor proved as metastatic follicular carcinoma of the thyroid gland. She received first dose of (Radioactive iodine) RAI131 ablation therapy 4 months later. Further debulking surgery of the pituitary lesion and to the thyroid recurrences were done. She is partially sighted due to rapidly enlarging pituitary metastasis with protruding eyes and lung metastasis. Fractionated ablative doses of RAI131 therapy and external beam irradiation were administered at early 2009 with steroid cover. The patient is still under close follow up with suppressive thyroxin therapy
Conclusion: We hereby present a rare case of follicular thyroid carcinoma metastasis to the pituitary gland with an aggressive behavior and brief review of literature.

Hall D Session 1
Intensive Care

341
Intra-Hospital Transport of Critically Ill Patients: Minimizing The Risk

Ayman O. Soubani MD (USA)

Critically ill patients often require transport from one department to another within the hospital for a variety of tests and procedures. This is a high-risk process that may be associated with significant morbidity. In order to reduce the risk to patient's safety it is recommended to assess the indication for the transport and follow a well structured process and a checklist.
This presentation discusses the adverse effects associated with intrahospital transport of critically ill patients. Followed by an overview of the preparation of patients before transport, the necessary equipment, human resources and monitoring involved during the transport process.

342
Weaning from Mechanical Ventilation

Ayman O. Soubani MD (USA)

Mechanical Ventilation is an essential tool in the management of patients with acute respiratory failure. However this therapy is associated with significant morbidity and mortality. Every effort should be made to liberate the patient from mechanical ventilation as soon as possible. The weaning process begins with daily assessment of readiness for spontaneous breathing that is best carried out by a protocolized process driven by respiratory therapist or ICU nurse. Routine use of weaning predictors is not necessary in majority of patients. A spontaneous breathing trial (SBT) is performed by assessing patient on low dose pressure support or T-piece. Patients may fail SBT due to multiple factors including imbalance between respiratory load and capacity, cardiac dysfunction and neurophysiologic factors. Several weaning modes are available for patients who require prolonged weaning.
This presentation provides an overview of the assessment of patient's readiness for weaning from mechanical ventilation, causes of weaning failure, modes of weaning, the extubation process and the role of tracheostomy.

343
Percutaneous Dilatational Tracheostomy

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Objectives: The aim of this study is to describe a modified technique of insertion of the tracheostomy tube in the ICU blindly without using the fiber optic bronchoscope.
Methods: In this study, 90 patients were selected retrospectively for this procedure, using the technique of free guide wire through a small incision in the lower part of the neck, without using the fiber optic bronchoscope was achieved depending on Sternal anatomical markings.

Results: All patients were tracheostomised safely in short time, usually less than 3 minutes, with minor complications.
Conclusion: This technique can be done in the ICU by a trained doctor with time saving and less cost .Also, it can be done blindly without moving the patients and with low incidence of complication .

Hall D Session 2
Ophthalmology

344
Progress in the Management of Age Related Macular Degeneration (ARMD)
Salwan Rassam MD (UK)

Age Related Macular Degeneration still remains one of the top causes of visual impairment in the world. While recent developments have made a dramatic improvement in its management, Dry Macular Degeneration and recurrence in Wet Macular Degeneration still present challenges.
Recent concepts in its pathogenesis, new pharmacologist agents will be discussed with possible future innovations.

345
Management of Macular Hole
Ayman Mdanat MD (Jordan)

346
Management of Advanced Diabetic Eye Disease
Salwan Rassam MD (UK)

Surgical intervention has become easier and safer with the advent of advanced equipment and techniques. Moreover, early surgical intervention promises better visual outcomes. An overview of the surgical approaches and pharmacological adjuvants will be presented.

347
Cyclodiode Laser Treatment in Glaucoma, Experience at King Hussein Medical Center
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Objectives: To evaluate Cyclodiode laser treatment for glaucoma at King Hussein Medical Center. Indications, outcomes, and complications
Methods: The medical records of all patients who had cyclodiode laser treatment for glaucoma at King Hussein Medical Center during the period between June 2006 and January 2010 were retrospectively reviewed. A total of 150 cases were enrolled in this study. A special record abstract form was used to collect the following data: type of glaucoma, presence or absence of pain, presence or absence of hyphema postoperatively. visual acuity, number and frequency of cycolodiode treatment, intraocular pressure, number of medications, and postoperative complications. Simple descriptive statistics (frequency, mean, percentage) were used to describe the study variables
Results: The mean age of patients was 59 ± 2.1 years (range 3.1 to 82.1 years). Types of glaucoma included uveitic glaucoma, paediatric glaucoma, aphakic/ pseudophakic glaucoma, neo-vascular glaucoma, traumatic glaucoma and previous failed trabeculectomy or Ahmed glaucoma valve.. The mean follow-up duration was 20.3 ± 1.2 months (range 10.2 months to 24.1 months). The mean intraocular pressure before surgery was 38.6 mm and 12.2 mmHg after surgery. The mean number of eye drops used by patient was 4.8 ± 0.5 (range 1 to 5) and 2.8 ± 0.2 (range 0 to 3) before and after surgery respectively. Transient postoperative hypotony was found in 54 patients. Absence of pain was noticed in 78 patients. Repeat of cyclodiode laser was done in 65 of patients.hyphema was present in 30 cases mostly in neovascular glaucoma
Conclusion: Results of cyclodiode laser treatment for glaucoma at King Hussein

Medical Center showed that it is safe and effective procedure for treating different types of glaucoma

348
New Approach to the Management of Suprachoroidal Haemorrhage

Salwan Rassam MD (UK)

Suprachoroidal is a relatively rare but devastating condition. Historic interventions often result in very poor prognosis. A better understanding in the underlying pathology has given insight into a
new management approach with much improved outcomes. An early intervention with drainage of haemorrhage and intraocular tamponade will be presented.

Hall D Session 3
Ophthalmology

349
MS and Non-MS Optic Neuritis

Gordon T. Plant MD (UK)

Most published research on optic neuritis is biased towards optic neuritis in multiple sclerosis (MSON). This because most of the research has been carried out in Northern Europe and North America where multiple sclerosis is a relatively common disorder. However it is of considerable importance that optic neuritis not related to optic neuritis (non-MSON) is recognised at presentation because the acute management is very different. It is well established that corticosteroid treatment in MSON is not mandatory because the result of treatment is to accelerate recovery but not to influence the eventual outcome. However total visual loss may be the outcome of not treating cases of non-MSON. This consideration is particularly important in those parts of the world where MS is less common or where there are immigrant communities from such regions. In this talk I will discuss the risk factors for non-MSON, the differential diagnosis and recommend an approach to management of such cases.

350
Idiopathic Intracranial Hypertension in Adults at King Hussein Medical Center: Presentation and Management

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Objectives: To study the clinical features, presentation, and management of idiopathic intracranial hypertension in adults.
Methods: Retrospective analysis of the medical records of all adult patients diagnosed with idiopathic intracranial hypertension, who fullfilled modified Dandy's criteria, attending the neuro-ophthalmology clinic at King Hussein Medical Center from january 2008 to december 2011.
Results: 66 patients were included, most of these were females(52,79%), the mean age for all 66 pateints was 30.89 years. The main presenting symptoms were headache in 48 patient, blurring of vision in 32 patient, tinnitus in 28 patients, and diplopia in 7 patients. Bilateral optic disc swelling was present in 63 patients, visual field defects in 96 eyes. CSF opening pressure was 25-35 cm H2O (water) in 42 patients, >35cm H2O in 24 patients. Medical treatment was started for all patients, 48 (73%) patients reponded to medical treatment, 14 (21%) patients had to undergo Lumbo-peritoneal shunt, and 4 (6%) patients were managed by optic nerve sheath fenestration.
Conclusion: Idiopathic intracranial hypertension is predominantly a disease of women in the childbearing years. Although the cause of IIH remains obscure, it has become clear that loss of visual function is common and patients may progress to blindness if untreated. Management of these patients should include serial perimetry and optic disc examination. Then, the proper therapy can be selected and visual loss prevented or reversed.

351
Therapeutic Approach to Functional Outflow Obstruction of the Lacrimal Drainage System

Thabit Ali Abdallah Odat, FRCS (Glasg), JBOphth, Essam Batayneh, JBOphth, Walid Qubain, JBOphth, Rihab Ghanma, JBOphth, Asma Abdellrahan Jaradat, SN, Balqees Ajarma, SN, Hanadi Ibrahim, SN.*
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Objectives: Epiphora is defined as overflow of tear on the cheeks due to obstruction of the lacrimal drainage system.
Methods: Management of epiphora includes history, eyelids and external ocular surface, tear film and lacrimal drainage system assessment. Ancillary tests are sometimes useful to diagnose certain lacrimal drainage apparatus like dacryocystography in case of dacryoliths and CT scan in case of lacrimal sac tumors.
Results: In the presence of patent lacrimal drainage systems proved by canalicular irrigation, functional epiphora is diagnosed which has many causes like eyelid malposition, punctal abnormalities (eversion, stenosis or megalopuncta), canalicular stenosis, eyelid imbrication, kissing puncta, conjunctivochalasis, large caruncle, and partial or functional nasolacrimal duct obstruction. Dacryoscintigraphy is important in the diagnosis of functional lacrimal drainage obstruction.
Conclusion: In this presentation we described few cases of functional epiphora and review the evolving diagnostic and therapeutic approaches in the literature.

352
Rehabilitation of Homonymous Hemianopia

Gordon T. Plant MD (UK)

Homonymous hemianopia (HH) ,may occur as a result of a number of cerebral lesions but in isolation it is seen most commonly following occipital stroke. As visual acuity is not affected it is often considered not to give rise to significant disability. However reading can be significantly affected – known as hemianopic alexia. Right HH disables left to right and left HH right to left readers). Can vertical reading provide a solution? It has also been shown that viewing drifting text can improve reading speed. Other rehabilitation paradigms will be described which aim to reduce the extent of the visual field deficit or improve scanning strategies. In many countries patients with hemianopia are prohibited from driving, is this justified and can rehabilitation programs reduce the risk of accidents for such individuals?

353
Posner-Schlossman Syndrome : A Case Report

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Objectives: To report a case of Posner-Schlossman syndrome which affected one of the Jordanian solders and to discuss the treatment options in such a case.
Methods: We report a case of 25 years old Jordanian male who attended to the ophthalmology clinic in Prince Ali Bin Al-Hussein hospital complaining of mild right eye pain and discomfort, blurring of vision and photophobia. . ocular examination revealed normal left eye examination, visual acuity in the right eye was found to be 6/24, mild corneal edema, keratic precipitates, cells in the anterior chamber of +1, minimal posterior polar lens opacity, intra ocular pressure of 45mmhg and normal posterior segment examination. Goinoscopy revealed open angel. Based on clinical findings the diagnosis of Posner- Schlossman syndrome was made.
Results: The patient responded initially well to topical steroids and anti glaucoma medications but he continued to have recurrent attacks of mild anterior Uveitis and marked elevation of intraocular pressure that did not respond later to maximum anti glaucoma medications and so the patient was referred to King Hussein Medical Centre for surgical intervention.
Conclusion: Posner-Schlossman syndrome is an uncommon condition that cause marked elevation of intra

ocular pressure which in turn may adversely affect the optic nerve causing irreversible damage.

354
Bedside Evaluation of Neurological Eye Movement Disorders

Gordon T. Plant MD (UK)

Eye movement disorders are commonly seen in Neurological disorders. The bedside techniques employed in their evaluation are not commonly taught to ophthalmologists and orthoptists more accustomed to the evaluation of of developmental strabismus. However active management of adult acquired strabismus is becoming more common. Furthermore the differential diagnosis of many neurodegenerative and neuroinflammatory conditions is much influenced by the identification of ocular motor abnormalities. In this talk I will give an illustrated guide to the identification and differential diagnosis of:

1) Disorders of fixation
2) Disorders of the saccadic system
3) Disorders of the smooth pursuit system
4) Disorders of the vestibulo-ocular reflex
5) Nystagmus

355
Efficacy of Subconjunctival Bevacizumab in Pterygium Management

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Objectives: To determine the effect of subconjunctival bevacizumab injection in pterygium management.
Methods: This study was conducted in 2012 on 16 patients aged 21 years to 45 years who attended the ophthalmology clinic at Benghazi Medical Center in Libya, a detailed history and ophthalmic examinations were done. After prepare the patients with topical tetracaine and ciprofloxacin, we use 23 gauge needles to inject bevacizumab (0.05 ml) subconjunctivally at the limbus (site of pterygium).
Results: About 81% of patients showed decrease in vascularity and redness after 10 days from injection, the remaining showed no improvement. After 3 weeks the vascularity returns back to the previous condition before the injection. No significant complications occur after this procedure except 3 patients developed subconjunctival hemorrhage.
Conclusion: Using bevacizumab in pterygium management is safe, but has short duration of decrease vascularity and can be used as adjunctive therapy with the surgical removal of pterygium, but has no role alone in treating pterygium.

Hall D Session 4
Ophthalmology

356
The World of Keratoprostheses

Christopher Liu MD (UK)

Keratoprostheses are corneal substitutes, used temporarily during vitreoretinal surgery, or permanently for restoring sight in corneal blindness not amenable to conventional cadaveric grafting. The dry eye or an eye with a defective lid or blink mechanism can be helped by the osteo-odonto-keratoprosthesis (OOKP) whereas the wet blinking eye can be treated with the Boston Type 1 keratoprosthesis. This lecture will explain how to select and refer patients appropriately, and provide an understanding on the capabilities and drawbacks of the two main devices in clinical use, and how they work.

357
Management of High Post-Penetrating Keratoplasty Astigmatism at King Hussein Medical Center

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Objectives: To report managing high astigmatism after corneal graft with corneal wedge excision, where other treatments are not appropriate to improve the visual outcome of post Penetrating Keratoplasty (PK) patients

Methods: We report our experience of 5 patients treated with corneal wedge excisions for high astigmatism after Penetrating Keratoplasty (PK) Corneal topographies of the eyes that had undergone P.K were obtained using OPD and Pentacam. Maps obtained were analyzed. Wedge resection was performed; a thin crescent of cornea from the area at the graft-recipient interface was excised measuring between 0.1 and 0.15mm in thickness, the length of incision centered at the axis of the flatter meridian of the cornea and was extended over a range of 60-90 degrees, then the wound was closed with interrupted 10-0 nylon sutures. Wedge resection was followed by fitting speciality Contact lenses to mask the residual astigmatism

Results: Case studies showed improved topographic appearance and a reduction of pre operative astigmatism, the maximum astigmatism treated was 32.6D,reduced to 6.64D postoperatively, significant improvement in both uncorrected and contact lens best corrected vision was also noted.

Conclusion: High Astigmatism is an important complication of penetrating keratoplasty, corneal wedge resection treatment proved to be helpful in treating cases of high astigmatism following penetrating keratoplasty, and With the use of contact lenses, the visual outcome can be significantly improved.

358
Cataract Surgery Master Class

Christopher Liu MD (UK)

Cataract surgery is the most commonly performed surgery and has a very high success rate. Whilst cataract surgery is commonplace to ophthalmic surgeons, we should be reminded that it is a unique experience for patients undergoing surgery. Their expectations of the surgical experience, the recovery period, and what visual results can be expected may be highly influenced by their own imagination, what the media portray, and what they have heard from friends and relatives who have undergone cataract surgery.

This presentation explores how we could optimise patient experience and outcome. It also covers common pitfalls which can create unhappy patients despite perfect execution of uneventful surgery. In simple terms, assess what the patient requires and desires, communicate what is and is not possible, plan the surgery in detail beforehand, avoid complications by knowing and not underestimating your enemy, undersell and over perform. Thus we should use a rigorous approach in assessment, demonstrate we have the best interests of our patients at heart, and offer them bespoke surgery following risk stratification.

Risk stratification is well known to cardiac surgeons. Essentially, all cataracts are not the same. For example, there are those with small pupil, weak zonules, corneal scarring, dense cataract, post-vitrectomy and so on. In addition, there may also be patient factors such as deep set eyes, bleeding tendency, cough, inability to lie flat, anxiety, deafness, etc. We all know which are risky cases, but we are not so good at estimating how these risks multiply when they co-exist. Electronic patient record allows easy analysis of batched results from multiple hospitals. The series of articles by Rob Johnston published in Eye is a good example. Risk stratification enables allocation of a suitably experienced surgeon and team for the case. The correct time can also be allocated, and surgeon and hospital statistics can be compared meaningfully.

The next section covers surgical devices such as iris retraction hooks, capsular tension rings and prosthetic iris devices to improve surgical outcome. The indications, techniques and rational use will be discussed. We will also discuss methods of delivery of cataract surgery. The majority of cases in the United Kingdom are done as day cases. "Cataract Surgery by Appointment" is the ultimate day case surgery, with patients self preparing for surgery and turning up at the ophthalmic theatre at a pre-appointed time. They can be in the hospital for as little as 30 minutes including surgery before returning home. The rationale and safety of immediately sequential bilateral cataract surgery will be described.

We then illustrate pitfalls with some case histories demonstrating the importance of

accurate biometry (we use the IOLMaster and optimised constants), surgically induced presbyopia, sight loss in glaucomatous eyes, and negative dysphotopsia.

359
The Outcome of the First 1000 Case of Lasik Performed at King Hussein Medical Center

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Objectives: To report the visual outcome of the first one thousand case of Lasik done at the Refractive centre of the Ophthalmology Department in King Hussein Medical Centre.
Methods: This is a retrospective study of the main outcome measures of predictability, stability, efficacy and safety for the first five hundreds patients (one thousand eyes). They all underwent Lasik operation in 2006-2007 with a follow up for three years. The patients were examined at one day, one month, six months, one year and three years after the surgery.
Results: Subjective refraction was done in all the above mentioned visits except the first day post operation which was only to check the integrity of the flap. At one month 78 % of patients were within ± 0.50 D of the intended correction and 92 % within ± 1.00 D. At three years 80 % were within ± 0.50 D of the intended correction with 89 % were within ± 1.00 D. After three years no eye lost more than one line of best corrected visual acuity. Regression towards myopia was noted, in patients who already have high myopia before correction, to be less than one diaptor.
Conclusion: Wide base of satisfaction among our patients were noted due to high success rate of the results which were also comparable with the international ones.

360
Phototherapeutic Keratectomy (PTK) for Treatment of Corneal Disease: Our Experience at King Hussein Medical Center

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Objectives: To evaluate the effectiveness of PTK for the treatment of various corneal leasions and present our results at King Hussein Medical Centre.
Methods: Retrospective study of 32 patients who were treated with PTK between October 2011 and May 2012 at the Laser Refractive Unit KHMC. Data collected included age, primary disgnosis, visual acuity, refraction and corneal thickness. Follow up ranged between one month and 7 months. Treatment ranged between transepithelial PTK for patients with band keratopathy, subepithelial scars, dystrophies, and 5-10um PTK after epithelial peeling for patients with recurrent corneal errosions.
Results: 32 patients with various surface corneal lesions were studied. 8 out of 32(25%) had recurrent corneal errosions. 12 of 32(37.5%) had band keratopathy. 3 of 32(9%) had old subepithelial scars. 2 of 32(6%) had Resi Buckler dystrophy. 3 of 32(9%) had keratoconus with nebula and 4 of 32(12.5%) with Salzmanns nodules. 28 of 32(88%) patients reported improvement of their visual acuity in the first week post PTK. 3 of the 32(9%) patients underwent cataract surgery after PTK facilitated visualization of their anterior chamber. Patients with recurrent corneal errosions reported improvement in symptoms and resolution of attacks within the follow up period
Conclusion: PTK is a safe and very effective surgical option for treating various corneal lesions and diseases.

Hall E Session 1
Laboratory Medicine

361 + 362
Introduction to CAP Lab Accreditation
Samir S Amr MD (Saudi Arabia)

How to Get Ready for your Lab Accreditation
Samir S Amr MD (Saudi Arabia)

Since its establishment in 1961, the Laboratory Accreditation Program of the College of American Pathologists (CAP) had expanded exponentially, with over 6,400 labs accredited by CAP. Most of these labs are in USA and Canada. However, over 120 labs in 38 countries outside North America are accredited. In the Middle East, Labs in Saudi Arabia (28), Lebanon (1), Egypt (1), Jordan (2) United Arab Emirates (10) and Kuwait (3) are accredited. Labs in Iraq and Bahrain are getting ready for accreditation by 2013.

One of the prime goals of CAP is to be the world leader and innovator in laboratory accreditation. The mission statement of CAP Lab Accreditation Program is "to improve patient safety by advancing the quality of pathology and laboratory services through education and standard setting, and ensuring that laboratories meet or exceed regulatory requirements."

The purposes and means of the inspection are:
- Voluntary
- Peer Review
- Lab Review
- Educational
- Assessment of Quality Performance

During the inspections for accreditation by CAP, pre-analytical and post-analytical aspects of quality management in the lab are examined. CAP had set standards as basis for accreditation decision. These standards are:
Standard I: It relates to the Laboratory Director
Standard II: It encompasses physical facilities and safety of the laboratory.
Standard III: It concerns the quality control and performance improvement.
Standard IV: It includes the inspections requirements.
Detailed checklists based on the requirements of the standards were created by CAP Accreditation Program. These 3,500 – 4,000 checklist items serve as instruments to guide the conduct of the inspection. Their format permits a comprehensive evaluation of a laboratory's compliance with the standards.

Deficiencies in the Lab According to Checklist items can be either:

Phase 1 Deficiency: They do not seriously affect patient care or safety and welfare of laboratory workers. They are considered good lab practice. A response is required, but documentations not required.

Phase II Deficiency: May have a serious effect on quality of patient care. They may affect health and safety of laboratory workers. A response and documentation are required.

In the last 11 years, over 90 inspections were conducted in the Middle East, either for first time accreditation or for re-accreditation. We formed our pool of local CAP Inspectors and Team Leaders through organization of "Inspector Training Seminars" and by recruitment of pathologists and lab supervisors and senior technicians, mainly from labs within Saudi Arabia.

We share in this presentation our findings, including frequently encountered problems and deficiency during lab inspections in the Middle East. These ranged from lack of proper documentation, poor QC program, lack of chemical hygiene plan, incomplete safety precautions in the lab, space problems, improper labeling of chemicals and issues related to maintenance of equipment. This shall give the audience an insight to how to get ready for CAP inspection by learning from pitfall and errors encountered by others.

363 + 364
Dysplastic Nevus and Melanoma Risk (Part I)
Ibrahim Khalifeh MD (Lebanon)
Dysplastic Nevus and Melanoma Risk (Part II)
Ibrahim Khalifeh MD (Lebanon)

A focus session is to address the topicof the dysplastic nevus and its relationship to melanoma.
Various viewpoints emerged, reflective of the fact thatdysplastic nevi have been the subject of ongoing controversyfor more than 20 years. The relationship of nevi and melanoma has mostpersuasively been shown in the epidemiologic literature,wherein multiple case-control studies show a positive, near linearrelationship between numbers of nevi and lifetimerelative risk for melanoma. Although there are fewer disputes that clinicallyatypical nevus phenotypes constitute risk indicators formelanoma, the proposition that the dysplastic nevus, definedhistologically, represents a risk indicator and a potentialprecursor lesion of melanoma is significantly contentious.
At the more practical level of daily dermatopathologypractice, discordance between skilled observers in theapplication of the published criteria for the dysplasticnevus remains a currently intractable issue. In part, thisis related to the fact that many of the criteria can be foundat various degrees of expression in otherwise clinically andhistologically banal nevi, reflective of a significant limitationin the specificity and predictive value of the criteria.
The objective of this session is to clarify the general recognition of the problems and limitations of dysplastic nevi as a risk indicator for melanoma, as well as discussions of the histologic criteria.

365
Overview of Cervical Neoplasia in Jordan in 30 Years Past
Yahia F. Dajani MD (Jordan)

Introduction
To date, apart from published records of Jordan Cancer Registry, only two studies from Jordan are readily available on the subject of cervical neoplasia during the past 30 years (References 1,2). This calls for more attention to this important area, compounded by the fact that the disease reflects on changing social behavior of our community in recent decades, adding to intrusive alien influences on cultural concepts. We need to better employ newly introduced techniques in the diagnosis and treatment of cervical neoplasia and, very important, implement preventive measures for this potentially fatal disorder.
Methods: A brief historical review will portray status of screening for cervical neoplasia
in Jordan during the past 30 years.
Results: Available data from selected primary and secondary health sites covering gynecological services will be presented. This includes prevalence rates within studied populations in primary and secondary care clinics, limited data on stage of cancer cases at time of diagnosis, as well as some pertinent data on HPV results. Logistic figures and socio-economic factors will be analyzed
Conclusions: Recommendations for Jordanians will be given, based on available findings from the field in light of international recommendations for screening and management of cervical neoplasia.

Hall E Session 2
Anesthesia

366
Ultrasound and Regional Anesthesia
Steven R. Clendenen MD (USA)

The success of real-time, ultrasound-guided insertion of needles for regional anesthetic administration and identifying/verifying the anatomical target prior to injection of local anesthesia has been documented to be benificial to patient care. Ultrasound offers a non-invasive, low risk safety factor whose benefits to quality of care, reduction in complications (both realized and expected), and the relative improvement in patient satisfaction. We will look at the basic physics and ultrasound sonoanatomy and different appearances of anatomical structures under ultrasound, including nerve plexi, terminal peripheral nerves, vasculature, fascia, and muscle. Identify different needle approaches to ultrasound guided regional anesthesia and appreciate its effect on observing advancement of the needle tip.

367
Update in Cardiac Anaesthesia
Omar Al-Rawi MD (UK)

As a Consultant in Cardiothoracic Anaesthesia and Intensive Care at The Liverpool Heart and Chest Hospital, I have observed many changes in cardiac surgical practice over the last few years. Changes in patients' demographics, the complexity of their co-morbidities, the rising cost of health care and advances in technology have all influenced these transformations. These changes have not only necessitated refinements of our routine cardiac anaesthetic practice but in some cases have required significant changes to it. All of this has had a significant impact on the training of cardiac anaesthetists and the acquisition of new skills that are essential competencies for the safe conduct of cardiac anaesthesia.
As with other surgical specialities, cardiac surgery is evolving towards minimal access approaches that have unique anaesthetic requirements and challenges; and in particular a significant move towards advanced anaesthetic imaging and monitoring.
Furthermore modern pharmacology has resulted in a variety of drugs with complex pharmacodynamics that often have a significant impact on surgical outcomes and provide further challenges for the cardiac anaesthetist. These challenges will be presented together with the controversy about Aprotinin that remains an interesting agent with intriguing future prospect.

368
Inhalational Agents, Review & Update
Imad Swaiss MD (Jordan)

Inhalational agents have evoluted long way since it started decades ago.
Nowadays, the latest available are near ideal properties leaving anesthetists with a good tool to manipulate all types of patients as well different types of surgical anesthesia needs.
Although there are many choices, each of which have its own pros & cones,Nevertheless when it comes to real practice,review papers show that it is concentrated in the use of only few.
Sevoflurane is one of the agents with properties enabling us to overcome many of the side effects of other inhalational agents.
Induction of patients with inhalational agents has many advantages over intravenous route, mainly in some patients' categories and special cases. As in any other anesthesia products, generic names have lots of disadvantages and complications over brand names, in the case of inhalational Sevoflurane this might lead to disastrous problems.
ICU usage of inhalational agents was a dream of intensivists with anesthetic original qualifications. All of the above will be explored in this
talk.

369
What's New in Neuroanaesthesia
Moawiya Ababneh MD (Jordan)

Lecture Outline:
- Goals of Neuroanaesthesia
- Neurosurgical Procedures ; Challenges

- What's New?
- What hasn't Changed?
- The Adult Brain
- Anesthetic Techniques
- Propofol Advantages & Disadvantages
- Remifentanil for Craniotomy
- TIVA for Neurosurgical Anesthesia
- Effect of Dexmedetomidine on ICP
- Neurosurgical Positioning
- Head Position
- Subarachnoid Hemorrhage: Evolution

Techniques

- Anesthetic Technique
- Mannitol
- Fluid Management
- Brain Injury & Glucose
- Temperature & Cerebral Metabolism
- How do we Protect the Brain?
- Aneurysm Rupture
- Radiology vs. OR
- Anesthesia for Aneurysm Coiling
- Emergence from Anesthesia
- 'Why Isn't the Patient Waking up?'
- Decision Time
- Pain in Neurosurgical patients:
- Advantages of Airway Control with ETT
- Awake Craniotomy
- Awake Craniotomy Requires
- Complications of Awake Craniotomy
- Anesthetic Agents for Deep Brain

Stimulation

- Areas of Functional Neurosurgery
- Areas of Expansion
- Trends
- DBS/VNS Studies in Progress
- Conclusion

370
Predicting Fluid Responsiveness, an Update

Ghazi Aldehayat MD (Jordan)

Hypovolemia is a common cause of hypotension in the perioperative period. However, it is difficult to predict patients who may respond to volume challenge with an adequate increase in cardiac output. The increase in stroke volume which results from the increase in end-diastolic volume depends on ventricular function since a decrease in ventricular contractility affects the slope of the relationship between end-diastolic volume and stroke volume according to Frank starling law. In many studies,only about 50% of patients have been shown to respond to volume loading by a significant increase in stroke volume or cardiac output. Therefore, it is important to choose a test which is reliable in predicting this response to optimize preload and avoid deleterious fluid overload. The evidence is accumulating now that dynamic parameters of fluid responsiveness such as, systolic pressure variation, stroke volume variation, and pulse pressure variation , are superior to static parameters (such as central venous pressure).

However there are certain limitation of the dynamic monitoring.

Hall E Session 3
Laboratory Medicine

371
Immunohistochemical Markers in The Evaluation of Primary CNS Tumors

Maysa Al-Hussaini MD (Jordan)

The diagnosis of primary CNS tumors is largely dependent on light microscopic findings. Ancillary techniques; especially immunohistochemistry are routinely used nowadays to support the diagnosis, rule out mimickers, in addition to its use as prognostic and predictive markers.

However; use of immunohistochemistry can be associated with pitfalls, and most antibodies used in neuropathology lack complete specificity and sensitivity. The apparent expression of some markers, the use of a different clone of certain antibody, the expression of same antibody by different tumor entities with variable prognosis or by normal brain structures entrapped within the substance of the tumor, and the significance of different staining patterns (membranous, cytoplasmic and nuclear) within tumor cells can all potentiate mis-interpretation.

Review of the most commonly used markers in CNS tumors and their potential pitfalls will be provided. This will include GFAP, synaptophysin, neurofilament protein, CD34, beta-catenin and others will be presented.

372
Drug-Induced Liver Diseases

Ismail I. Matalka MD (Jordan)

The diagnosis of drug induced liver injury (DILI) is an increasing, challenging, and sometimes difficult diagnosis. This is related mainly to the complex patterns of injury leading to variable histological changes and often associated with incomplete clinical and drug history and difficulty to elicit the herbal medicinal usage or related unforeseen toxic, harmful materials and supplements.

The histological features produced by drugs and toxins can mimic and overlap with almost all types of primary liver lesions and therefore such diagnosis can only be rendered with certainty in the appropriate setting and exclusion of all other primary liver diseases. However, in some situations where there is a background primary liver disease this can impose extreme difficulty in establishing the diagnosis with further implication on the subsequent management and prognosis.

Awareness of the potential damaging effects by the ever increasing number of individual drugs is needed by all the practicing physicians including the pathologist for better diagnosis and management.

This talk will present the pathophysiology of drug induced damage of the liver and highlights the most common drugs causing different patterns of injury.

373
FLT3 Internal Tandem Duplication and D835 Mutations in Acute Myeloid Leukemia Patients Diagnosed at Jordan University Hospital

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Objectives: To analyze Fms-like tyrosine kinase 3 (FLT3) internal tandem duplication (ITD) and D835 mutations in 50 acute myeloid leukemia (AML) patients diagnosed at Jordan University Hospital.

Methods: Fifty AML patients, M:F ratio of 1:1, diagnosed at Jordan University Hospital using French-American-British (FAB) classification were analyzed for FLT3 mutations, including ITD and D835 by polymerase chain reaction(PCR) using restriction fragment length polymorphism (RFLP).

Results: Twelve patients (24%) were found to have FLT3 mutations. FLT3 mutations were higher in cases with monocytic differentiation. 66% of cases with FLT3 mutations were associated with leucocytosis.

Conclusion: Detection of FLT 3 mutations in AML is considered to be easy, fast and inexpensive. It is advised to be performed on routine basis. FLT3 mutations activation in AML might be associated with monocytic differentiation. FLT3 mutations in AML carry poor prognosis, so early detection of such mutations with intensification of induction chemotherapy might be useful to overcome this poor prognosis.

374
Identification of 60 Cases with a Rare Genetic Disease Alkaptonuria in Jordan

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Objectives: Alkaptonuria (AKU) is a very rare genetic disease affects 1 in 250,000 people worldwide; however, the prevalence is unknown in Jordan. Clinical features of AKU are darkening of urine, dark pigmentation of connective tissues (ochronosis) and arthritis of large joints and spine. A research project was launched recently at the Faculty of Medicine/ Mutah University. The aims of the project were to identify patients with AKU in Jordan, raise the awareness about AKU among health care providers and the community, and to identify mutations in the HGD gene in affected individuals.

Methods: Urine samples were collected from individuals with history of dark urine and from all their family members. Diagnosis was made by observing changing in urine colour after prolonged standing of samples, and by adding ferric chloride (FeCL3). Confirmation of diagnosis was done by measuring the levels of homogentisic acid. Signs and symptoms were assessed by performing clinical examination. Radiological examination was performed to assess the progression and complications of the disease using x-ray, ultrasound, CT-scan, and MRI.
Results: Preliminary results have identified 60 cases of AKU (age range, 1-60 years). The clinical, biochemical and genetic findings will be presented. Five novel mutations have been identified in Jordanian population.
Conclusion: The prevalence of AKU is likely to be high in Jordan due to the high rate of consanguineous marriages. Furthermore, AKU should be in mind of physicians when evaluating patients with history of dark urine and low back pain.

375
Prevalence of Meropenem Susceptibilty among Gram Negative Pathogens Isolated from Intensive Care Units in Jordan

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Objectives: Meropenem is a relatively new carbapenem in some Middle East countries; our aim is to evaluate its susceptibility in gram-negative pathogens isolated from ICU patients and to identify the prevalence of ICU bacterial isolates identified as pathogens based on CDC-NHSN definition for pathogens in the affected organs
Methods:
Results: One-hundred and seventy-three gram-negative pathogens were reviewed for susceptibilities and ESBL production. E. coli was a dominant pathogen followed by Klebsiella, and Pseudomonas. ESBL-production was in E. coli (62.7%) and Klebsiella (58.6%), considering all gram-negative bacilli studied; ESBL rates were 30.7%. Both Meropnem and Imipenem showed superior activity against gram-negative pathogens. Meropenem did better than imipenem against pseudomonas species, but PIP/TAZ did better than both carbapenems ($p = 0.02$). The difference in susceptibility patterns among ESBL-producing pathogens compared with same non-ESBL producers species showed that carbapenems were superior to other classes of antibacterials tested in this regard, and rates of resistant ESBL to both carbapenems were 5.6%; trustworthy in the initial empiric therapy in ICUs and hospitals that suffer from high rates of ESBL-producers. While PIP/TAZ showed highly significant difference ($p < 0.0001$) in activity against ESBL and non-ESBL producers
Conclusion: Meropenem and imipenem are trustworthy in the initial empiric therapy. Gram-negative pathogens are highly susceptibility to both carbapenems, and benefit extends to ICUs with high rates of ESBL-producers.

376
Snapshot on Molecular Genetic Pathology Updates

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Objectives: This presentation highlight and emphasis on the most important updates in molecular oncology and genetics with relevant and clear clinical utility.
Methods: Online resources including journals, webinars, and different genetic committee guidelines were reviewed.
Results: Molecular genetics pathology is an emerging field of pathology; simply it implies medicine under submicroscopic level through studying human biomarkers that aid in elucidating disease etiology and pathogenesis, help in diagnosis, set prognostic stratifications and most importantly pave the road for applying personalized medicine through targeted and tailored therapeutic options.
Conclusion: Molecular genetics pathology is a fast pace specialty where at least a weekly updates is a mandatory to catch up important updates, new guidelines and recommendations in

order to achieve and maintain the most optimized patient care.

377
Measurement of Some Biochemical Parameters in Serum of Some children with Autism in Jordan

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Objectives: Is to measure some biochemical parameters changes like (Homocysteine, Methylcobalamine (Vit.B12), folic acid, fasting blood sugar and lipid profiles) in the serum of autistic children in Jordan compared with normal subjects matched with age, sex and body mass index (BMI). To find if there are any relation between the blood levels of these parameters and the cause of autism in Jordan, trying to give some guide in their treatment. This is the first study done in Jordan and Arab countries utilizing all five parameters.
Methods: All the serum biochemical parameters are measured by special kits using spectrophotometer, Elisa, and HPLC.
Results: There were significant and insignificant differences between the matched patients and controls in the measured biochemical parameters
Conclusion: A lot of the studies about autism were done outside Jordan which specify some other parameters; however, in this study performed in Jordan we tried to screen some specifically deficient or increased serum biochemical parameters which can have an affect in the diagnosis and treatment of these children, but until now Jordan and Arab countries need more studies.

378
Updated Guidelines in Immunophenotypic Characterization of Hematopoietic and Lymphoid Tumours

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Objectives: To elaborate and illustrate the updated guidelines in immunophenotypic characterization of hematopoietic and lymphoid tumours using flow cytometry based on different institutes and societies with special emphasis on Euro consortium.
Methods: Setting updated immunophenotypic guidelines for characterization of hematologic and lymphoid tumours was based on many standardization efforts including different institutes and societies according to general laboratory practice guidelines.
Results: Standardization guidelines ended up in the usage of comparable flow cytometers with full standardization of instrument settings, laboratory protocols, immunostaining procedures and careful selection of antibody panels using 8-color tubes with the adoption of automated pattern recognition of normal and abnormal patient samples.
Conclusion: Applying updated guidelines in immunophenotypic characterization of hematopoietic and lymphoid tumours nowadays is mandatory for definite diagnosis of difficult and overlapping cases that cannot be recognized by conventional flow cytometry.

379
Importance of Infrared Rays and X-ray Study of the Inhibition of Calcium Phosphate Lithiasis and Struvite Crystal Formation using Plant Extracts

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Objectives: To highlight the importance of the use of infrared-rays and X-ray in this work. We performed an in

vitro crystallization study enabling the specification of kinetic and thermodynamic conditions of formation and growth of crystalline calcium phosphate
species. We used wild Algerian medicinal plant extracts which prevent, slow down or reduce crystallization phases.
Methods: We chose the classical model for the study of phosphate crystallization without inhibitor and with it, in order to assess the inhibiting capacity of any chemical species used. The precipitation of the solid phase of phosphates from artificial urine was studied . The crystal size development was monitored by polarized microscopy at different time intervals. After crystallization time, the mixture was filtered, the recovered dried precipitates were analysed by FTIR spectroscopy and X-rays diffraction technique and chemical analysis.
Results: In the absence of plant extract inhibitors (Acacia raddiana, Citrullus colocynthis, Rhus tripartite), the crystallization of phosphates led to the formation of struvite and amorphous carbonated calcium phosphates (ACCP), after 6 hours. In presence of lower concentrations of plant extract inhibitor, inhibition was partial. The addition of 1 ml of plant extract to the mixture decreases the size of crystal. After 4 hours the size of crystals stabilized at 20.67 µm. The complete disappearance of struvite crystals was obtained after addition of 10mL of plant extract inhibitor. Only Pentahydrated octocalcium phosphates (POP) and ACCP were formed. In the presence of other inhibitor extract plant, the inhibition of struvite growth and aggregation increased. The addition of up to a volume of 20 mL of the second inhibitor resulted in total inhibition and crystalline transformation of the ACCP into carbapatite (CA). Phosphate compounds encountered in urine can be dangerous and the use of inhibitors to prevent, slow down or reduce crystallization phases might be very helpful.
Conclusion: In this investigation, plant extracts proved to be good inhibitors. Their effect varies according to solution pH but they are more efficient in less acidic or neutral urine than in alkaline one.

Hall E Session 4
Anesthesia

380
Update in Thoracic Anaesthesia
Omar Al-Rawi MD (UK)

Changes in medical technology, patients' demographics and surgical philosophy have resulted in older, sicker patients presenting for thoracic surgery. Simultaneously, a global economic downturn has mandated the development of new strategies to reduce hospital stay. One successful strategy has been the use of minimally invasive techniques for a variety of thoracic surgical procedures. The move to less invasive surgery and enhanced recovery has provided thoracic anaesthesia with the opportunity to evolve to meet these new challenges. Changes to techniques of one lung isolation, management of intra-operative of one lung ventilation and post-operative analgesia will all be described.

381
Central Neraxial Ultrasound (Ultrasound of the Spine for Epidural Placement)
Steven R. Clendenen MD (USA)

Spinal anesthesia and epidural needle insertion and paravertebral block is usually a blind technique where the rate of adverse events depends on the experience of the operator. Ultrasound can be used to guide placement of an epidural catheters, spinal anesthesia and paravertebral block placement. The ultrasound sonoanatomy and techniques of cenrtral neuraxial and paravertebral blocks will be described.

382
Where We've Come From & Where are We Going?
Moawiya Ababneh MD (Jordan)

This lecture will highlight the history of Anesthesia in Jordan, The Jordan Medical Council, the Anesthesia Society, anesthetists Shortage, Current problems and proposals to solve them.

383
Impact of Bolus Dose of Vasoactive Agents on ST Segment Changes During Incremental Hypotensive Anesthesia Technique in ENT Surgery: Our Experience at King Hussein Hospital

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Objectives: To assess the effect bolus dose of nitroglycerin or labetalol in decreasing the mean arterial pressure and changing ST segment during hypotensive anesthesia in different ENT surgical procedures.
Methods: Our prospective investigation included 160 patients,of both sexes,aged 17-76 y,ASA I-III and scheduled for various ENT surgical techniques at KHH,KHMC,Amman,Jordan,during the period Nov 2011-May 2012.
Patients were exposed to hypotensive anesthesia (n=117)or were not exposed to hypotensive anesthesia(n=43) according to the surgeon's preference and patients medical status. Patients received several bolus doses of nitroglycerin 0.2mg,labetalol 5mg or both ,targeting a mean arterial pressure of < 60mmHg or a clear surgical field(Fromm-Boezaart scale).
ST segment significant changes (if ST was > than 1mm above or below electrical baseline) were followed up during surgery in leads II, V5, and aVL in association with mean arterial pressure of 60 mm Hg.
Results: Of 18 patients who received nitroglycerin, four patients received mean nitroglycerin doses of 0.6 mg and responded with MAP of<60mmHg with significant ST segment changes in 3 of them.
Of 34 patients who received labetalol,thirteen patients received mean labetalol doses of 13.8mg and responded with MAP of <60mmHg with significant ST segment changes in 7 of them.
Of 65 patients who received nitroglycerin and labetalol,twenty five patients received mean labetalol of 16.2mg and mean nitroglycerin of 0.47mg and responded with MAP of <60mmHg with significant ST segment changes in 17 of them.
Conclusion: A mean bolus dose of 0.6mg nitroglycerin,a mean bolus dose of 13.8mg labetalol or a combination of mean bolus dose of 16.2mg labetalol with mean bolus dose of 0.47mg nitroglycerin can be effective and safe .

Hall F Session 1
Plenary Session: Diabetes Mellitus

384
The Role of the Newer Drugs for the Management of Type 2 Diabetes

Paul E. Jennings MD (UK)

Type 2 diabetes accounts for up to 95% of all diabetes cases in the developed world and each year another 7 million people develop diabetes. Such is the scale of the epidemic that new therapeutic approaches are being developed to improve the morbidity and mortality of affected patients. In 2010 in the United Kingdom 10% of the NHS budget was spent on treating diabetes and its complications. New drugs are developed that promise therapeutic advantage yet most new agents only lower HbA1c by 1% (10mmols/mol) but carry significant economic consequences if their use is widespread and often lack the safety data and long term efficacy data of previous recommended treatments. Numerous drug combinations can be used.
The paper to be presented will address the therapeutic combinations that can now be prescribed, focusing on the recommendation and guidelines presently in use, aiming towards an individualised patient centred approach.

385
Challenges in Managing Dyslipidemia in Diabetes

Nadim Jarrah MD (Jordan)

Type 2 Diabetes is a very prevalent medical problem in all communities including Jordan, T2DM usually doesn't happen alone, it is associated with
several co-morbidity the most common is Diabetic dyslipidemia, which has unique features characterized by high triglycerides

levels, low HDL-Cholesterol levels & increased small dense LDL-Cholesterol levels. This type of dyslipidemia is severely atherogenic increasing the risk of Cardiovascular mortality in diabetics, the corner
stone in managing diabetic dyslipidemia is by using Statins, but still with Statin use their is still a significant residual CVD risk creating a real challenge in managing
dyslipidemia in diabetics, also presenting the unique pathogenesis of diabetic dyslipidemia which is directly related to the insulin resistance status in T2DM, lastly demonstrating the latest guide lines in diabetic dyslipidemia management.

386
Hypertension and Cardiovascular Disease in Diabetes ; Value of Strict Control

Jihad Haddad MD (Jordan)

Cardiovascular diseases, including CHD, stroke, and peripheral vascular disease, are common causes of morbidity and mortality among people with diabetes, and at the time of diagnosis of diabetes, most patients already have evidence of CVD. The prognosis for patients with CHD is worse in individuals who also have diabetes than for those who do not.
Hypertension is more than just elevated blood pressure. There are all kind of markers of vascular abnormalities that are found. Hypertension is frequently found in patients with diabetes and Metabolic Syndrome, with a prevalence approximately twice that of the nondiabetic population. The frequent association between hypertension and diabetes is more than a chance finding.
Up to 75% of diabetes-related cardiovascular complications may be attributable to hypertension.
A high level of fasting insulin(with normal sugar values) was related to a significantly higher incidence of hypertension, hypertriglyceridemia, decreased high-density lipoprotein (HDL)-cholesterol concentration, and type 2 diabetes.
In patients with diabetes, a target blood pressure goal of <130/80 mm Hg is recommended.
Hypertension is more difficult to control in diabetic patients than in nondiabetic patients. Several published studies corroborate the need for multiple antihypertensive agents (on average 3) to achieve target blood pressure goals in Diabetics
Because numerous studies document the benefits of therapeutic interruption of the renin-angiotensin system to retard the development and progression of diabetic nephropathy, both angiotensin-converting enzyme inhibitors and angiotensin receptor blockers are now considered first-line therapy for the prevention of nephropathy. Beyond BP reduction, RAS inhibition may provide additional benefit in terms of prevention of coronary artery disease in diabetic subjects.
Also, several studies showed that the inhibition of the renin-angiotensin system can prevent the new onset diabetes.

387
Meeting the Need for Better Diabetes Pregnancy Outcomes by Organised Pre- Conception Care

Eleanor M Scott MD (UK)

Diabetes in pregnancy is associated with substantial risks to the mother and the developing fetus. Most of the damage is done very early in the first 6-10 weeks of pregnancy. Poor glycaemic control at the start of pregnancy is the most significant risk factor for both congenital malformations and stillbirth which are increased up to 4-fold compared to healthy women. The outcomes are similarly poor for women with type 1 and 2 diabetes. In the UK it is clear that women with diabetes are inadequately prepared for pregnancy. There is poor evidence, if any, of pre-pregnancy counselling, preconception use of folic acid or safe glycaemic targets being achieved. In addition many women with diabetes are being managed on drugs to reduce cardiovascular risk that are contraindicated in pregnancy. Structured preconception care is cost effective and substantially reduces the risks of an adverse pregnancy outcome.

388
Current Approach to the Management of Diabetic Retinopathy

Salwan Rassam MD (UK)

Approach to the management of diabetic eye disease begins with an efficient screening
program. Treatment paradigms now involves a number of pharmacologic agents and new laser techniques. This talk will highlight most of these new concepts and possible combinations.

389
Challenges in Managing T1DM in Children and Pediatric Age Groups

Sima Kalaldeh MD (Jordan)

Management of diabetes in children greatly differs from that in adults for many reasons. Ideal sugar control and the prevention of late morbidities related to diabetes poses a challenge in children due to their need for glucose for energy as well as growth. Coupled with irregular eating habits the constant strive of children for sweets and recurring childhood infections makes ideal glucose readings on a daily basis the physicians and parent's ongoing struggle.This presentation will go through many different aspects related to these challenges and their link to glucose control as welll as the effects of different treatment modalities that mirror the lifestyle and eating habits of children.

Hall F Session 4
Military Medicine

390
The UK NHS and Military Approach to Major Haemorrhage

David Halliwell MSc Paramedic FIfL, Director of Education Southwestern Ambulance NHS (Uk)
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Objectives: This session aims to explain how the uk ambulance and military have prepared for terrorism threats in the lead up to the Olympics. It will cover - patient assessment - cabcde Use of equipment supplied to control major haemorrhage on a military and ambulance setting Arterial tourniquets Wound packing Haemostatics Dressings - oales and blast dressings Russell chest seal Nightingale chest seal
Methods: The session can be delivered either as a lecture, or a practical teaching workshop. (If it is to be a practical workshop we can provide amputees with prosthetics to create a memorable teaching event.)
Results: This session is designed to explain why survival of uk troops is so good.
Conclusion: The lecturer is the gold medical commander for this years Olympics in the uk. He has extensive experience of tactical medicine, teaching military, police and other agencies, and is a lecturer in senior medical planning for the national health services response to the Olympics and increased terrorism threat. David lectures throughout the world, having taught in Australia, Norway, Qatar and at sofex 2012.

391
Medical Battalion versus Newly Organized Medical Military Support Group on Providing Health Care During Peacetime and Operations

Ali M. Refai MD, Hashem Abdallat M.D. Ahmad Abdallat M.D. Salem Zawahreh M.D. Sameer Ajarmeh M.D.*
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Objectives: To study the effect of changing organization of formerly medical battalion to newly organized medical military support group on providing health care to military personnel during peacetime and operations.
Methods: Review of the records of organization, formation, operational plans and human resources of both medical battalion and medical military support group. The organization, formation and human resources of medical battalion was 3 medical companies and one logistic company with 18 medical physicians and 45 nurses with total number of 167 human resources, while medical military support group organization, formation and human resources was 3 medical centers and a command section with 12 medical physicians and 36 nurses and total numbers of 211 human resources.

Results: Each company in the medical battalion can open independently according to its construction a medical center in the brigade during peacetime and a tented surgical level II military hospital during operations through an operation order from the battalion commander, while the medical military support group can open a good primary medical center during peacetime in the brigade, lack to open indepedently a tented level II hospital because of its new organization.
Conclusion: Providing medical care through medical battalion is more flexible for operational medical support than through medical military support group which is more suitable for peacetime health care

392
School of Royal Medical Services "Achievements and Ambitions"

Lt. Col. Fawzia Ebrahim A.Wahab, 1st Lt. Eman Mubarak Al.Shaikh*
** Commanding officer at School of Royal Medical Services; The direct administrator for all programs & courses offered as well the candidates / Students and all the faculty members, Instructors, clinical instructors, trainers and secretaries. Bahrain*
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Objectives: As addressed in the theme" Treating - Training - Teaching" of the 6th International Conference of the Royal Medical Services to be held at King Hussein Bin Talal Convention Center - Dead Sea, Jordan in the period of 19-22 Nov 2012, we would like to participate actively in this well reputed occasion by presenting a paperto introduce our School of Royal Medical Services which has gone through a series of developments since it's establishment in 1994. 1. The paper will bring to light the tasks and duties carried out by School of Royal Medical Services which is mainly to provide training courses to Bahrain Defence Force Royal Medical Services personnel and other BDF units, as well training courses are provided to other governmental and private sectors in the Bahrain Kingdom. 2. Also the achievements and future ambitions will be addressed in this presentation.
Methods: Paper will be presented by Power Point
Results: Inforamtive Paper to Introduce our school at the field of training and teaching.
Conclusion: To share our experince with the the other countries in this field.

393
Paratroopers' Injuries During Jumps in the Joint Special Operations in Jordan

Samir Mohamed Al-ofeishat MD, Akhlas ALbataina MD*
** Col Dr. Samir Mohamed Al-ofeishat, JB a specialist emergency medicine, Royal Medical Services (Commander of medical support at Joint Special Operations) (Jordan)*
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Objectives: This study will analyse the rate and patterns of parachuting injuries at the Joint Special Operations in Jordan.
Methods: A descriptive study was designed; a from 487 paratroopers' who worked at Joint Special Operations in Jordan were collected. The data included: the age of paratroopers, number of jumps, types of injuries, types of fractures, and the cause of parachuting injuries.
Results: A data from 487 paratroopers were collected and analyses, the age of the paratroopers range from 18 to 42 years old, most of paratroopers were between 26-35 years. A 206(42.3%) of paratroopers were jumping from5-10 jumps while 157(32.2%) were jumping 11-20 jumps and 47 (9.7%) of paratroopers were jumping above 50 jumps. A 183 of the paratroopers were subjected to injuries or fractures during jumping from aircraft, with a 163 paratroopers had injuries and 20 of paratroopers had fractures. A 62 cases (38%) got sprains during jumping, while a 33(20.2%) of paratroopers subjected to more than one types of injuries (head injuries, abdomen injuries, upper limbs and spinal injuries), 26(15.9%) cases got lower limb injuries, the fractures of the lower limbs rate was 12(60%) of paratroopers fractures. An 87 of the paratroopers were subjected to injuries or fractures during jumping from aircraft, due to the windy weather while 29 of the cases due to improper landing and 28 of the cases due to the uncertain causes.

Conclusion: More studies are need about Paratroopers' injuries during jumping in the Joint Special Operations in Jordan which will make it possible to compare future studies from other sectors in Jordan with ours.

394
Variations in ABO System Re-Typing and Possibility of Warm Blood Transfusion in a Military Territory Personnel

Ali M. Refai, MD, Family Medicine Specialist , Family Medicine Department , Royal Medical Services (Jordan)
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Objectives: To find out the correct blood group of all personnel in a military territory by re-typing their blood group , after discovering a large number of officers and soldiers with incorrect blood group when they donate their blood for blood transfusion and find out the importance of blood group determination generally and in warm blood transfusion in battlefield.
Methods: The blood group of all of the officers and soldiers in a military command numbered (7991 personnel) were re-typed for their blood group and cross matching with the conventional techniques used in the Laboratories of Royal Medical Services.
Results: From the total number, officers were 508 and soldiers 7483 in a percent of 6% and 94% respectively. Most of the population study group was healthy and young with main age of 32 years. Large differences in overall blood groups before and after re-typing were found in percentage of 31%.
Conclusion: These differences in blood groups are due to either of ignorance of soldiers to their blood group or wrong records. It important to determinate blood and have the correct records ready for emergency donation generally and especially in military personnel to be ready for warm blood transfusion in battlefield.

395
Role of Preventive Medicine Department in Military Medicine

Mohammad Alzoubi MD, Chief of Preventive Medicine Division-DRMS(Jordan)
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Objectives: It is a lecture not a research for military medicine session-day. Preventive Medicine is the branch of medicine which is concerned Primarily with Preventing diseases and injuries rather than treating sick people with the aim of Preservation, Restoration, and Monitoring, Promotion, Evaluation and analysis of the Health status of the Jordanian Armed Forces. Roles and Duties of Preventive Medicine Department - Vaccination of the Jordanian Peace Keeping Forces and Humanitarian Mission Personnel to endemic areas in different Countries all over the world according to United Nation recommendations. - Vaccination of health care workers and the newly recruited personnel in Military and Security Forces. - Providing the relevant vaccines and chemo prophylactic agents for intimate contacts of patients in epidemics which occurred at the Royal Medical Services according to the national protocols Medical Screening: for hazardous Workers, Food handlers and Laboratory screening for all travelers when arrived. Health Education: for Military Personnel inside Jordan about common Public Health problems (prevention and control) and Jordanian Peace Keeping Forces members about endemic diseases in the mission areas and providing them with IEC materials
Methods: Epidemiological Investigations for epidemics: among Jordan Armed Forces Units, Military and police Training Centers, Participation with MOH in Common Public Health outbreak threats.
Results: Communicable Disease Surveillance and Control of the risks and threats. Exchange information with the relevant National, Regional, and International organizations and agencies regarding Communicable Disease Prevention and Control in endemic areas (mission areas) for Jordanian Peace Keeping Forces deployed in different areas
Conclusion: Training Courses in Public Health and Preventive Medicine for: Military Personnel inside Jordan and for Peace Keeping Forces members

396
The Role of the Royal Medical Services in Preparing Military Field Hospitals Inside and Outside Jordan

Hashem Abdallt, MD,FM,JB, Eqab AbuWandi,MD,MPH. Mahmud Abdallat,MD. MPH*
** Director of Field Medicine, Royal Medical Services (Jordan)*
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Objectives: To describe the role of the Royal Medical Service in preparing military field hospitals inside and outside Jordan and the different Health Services they provided.
Methods: This presentation can be communicated as a lecture or practical field demonstration
Results: This presentation showed the importance of deploying military field hospitals,and the major role in improving health status of military and the locals.
Conclusion: These hospitals are crucially important to treat, prevent and deliver health care services in a very dangerous, difficult unreachable areas.

Hall G Session 1
Pediatrics

397
Overview for Spasticity Management in Adult and Pediatric Age Groups, the Most New Treatment Options

Yasser Awaad MD (Saudi Arabia)

Spasticity Management for children has multiple facets including medical treatment & surgical treatment. Understanding the Spasticity problem including children & caregiver & a different modality available to us to treat Spasticity, it is highly recommended. Spasticity management is always a team work including multiple-specialty physicians, technicians & clinicians. In this presentation we go over the traditional & the most updated Spasticity management including the medical & surgical treatment in a team-oriented approach. Spasticity management is an evolving, dynamic & changing field which demands updating our knowledge & information overtime to give the best treatment available for children & their caregiver.

398
Update on Management of Intractable Epilepsy in Childhood

Abdel Karim Al-Qudah MD (Jordan)

Antiepileptic drugs do not control seizures in about quarter to one third of epileptic patients.Treatment - resistant epilepsy has negative psychosocial,cognitive,behavioural,school achievement and even financial consequences.Moreover,mortality rate is increased.Advances in diagnostic facilities and treatment modalities are offering children with intractable epilepsy more hope and possible cure.Epilepsy surgery is increasingly used to treat intractable childhood - onset epilepsy. Patietns with intractable epilepsy who are not candidates for epilepsy surgery could benefit from neurostimulation. Vagal nerve stimulation has been shown to be cost-effective treatment and improving health- related quality of life. Dietary treatment using high fat and low carbohydrate diets (four diets) are used in the management of intractable epilepsy. Herbal treatments,immunomodulation and palliative care are also,other options in the managementof intractable epilepsy.

399
Tourette Syndrome, the Most Clinical and Practical Approach

Yasser Awaad MD (Saudi Arabia)

Tics are rapid, sudden, unexpected, irresistible, inappropriate, repetitive, stereotypic, of brief duration and variable intensity, and occur at irregular intervals (1). They are involuntary muscles contractions, and/or involuntary noises and words.
It is not unusual for children to exhibit tics; but when both motor and vocal tics are present for a period of 1 year with no tic-free period of more than 3 consecutive months, the diagnosis of Tourette's syndrome should be considered (American Psychiatric Association, 1994, pp.101-103). When either vocal or motor tics, but not both, are present for more than 1 year, the diagnosis is chronic motor or chronic tic disorder).
On the other hand, Tourette's syndrome

is a familial neurobehavioral disorder characterized by the presence of fluctuating involuntary motor and vocal tics (3). It often co-occurs with attention deficit hyperactivity disorder (ADHD)) or obsessive-compulsive disorder (OCD) or obsessive-compulsive symptoms (OCS). In childhood and adolescence especially, the condition is often complicated by learning problems, other behavioral/psychiatric problems, and is occasionally accompanied by other neuropathology such as seizures.
Interest in Tourette's syndrome has increased over the past two decades. Tourette's syndrome is an everyday disorder which seen regularly in the child neurology clinics.
Once thought to be a rare condition, prevalence of Tourette's syndrome is now estimated to be one case per thousand boys and one case per 10,000 girls (10).
Tourette's symptoms were first described by Bouteille in 1810. The first case of a Tourette's patient, written by Itard (1825), was that of the Marquise de Dampiere. In 1885 Gilles de la Tourette described nine cases with a unique neurological disorder. Due in large part to his careful delineation and description of the symptoms, the syndrome now bears his name.
This presentation is going to address the clinical approach for how to assess and treat patients with different combinations of signs and symptoms.

400
Difficult Asthma in Children: Progress and Emerging Therapies

Talal Nsouli MD (USA)

The diagnosis and treatment of pediatric asthma is different from that of adult asthma. Childhood asthma is a heterogeneous disease with many phenotype expressions. A variety of wheezing phenotypes occur early in childhood. However, many children wheeze during the first few years of life but an estimated 60% are transient early wheezers and will most likely outgrow their disease around six years of age. Approximately 15% of wheezing infants will develop asthma in the future. The severity of asthma early in life determines the severity of the symptoms and deterioration of lung function in later years. Asthma is an inflammatory disease of the lungs and it consists of bronchial inflammation, airway hyperresponsiveness, airway obstruction, and airway structural abnormalities. Studies showed that bronchial asthma is a Th2 driven disorder in the majority of cases. Early in life, certain viruses have been incriminated with the development of asthmatic phenotype. Respiratory syncytial virus (RSV) infection has been shown to correlate with recurrent wheezing in childhood. In some instances, IgE anti-- RSV has been found in some patients with RSV infections. Patients that experience RSV infections are at higher risk to develop chronic wheezing. Paradoxically, other viral infections have been shown to possibly prevent the occurrence of asthma. This has been proposed by the "Hygiene Hypothesis" which suggests that early life exposure to protective factors, such as a large family size, leads to a high number of infections that may provide protection against the development of atopic diseases. Other studies suggest that early life exposure to bacteria may also down regulate the development of Th2 driven asthma. This could be explained by the CpG motif oligodeoxynucleotide that stimulates the production of T-bet which is a transcription factor for the production of Th1 cells. The activation of Th1 pathway downregulates the Th2 allergic response by the increase of IL-12 and production of interferon gamma. However, this paradigm called the "Hygiene Hypothesis" is still open to debate. One should consider some key symptoms that could indicate the diagnosis of asthma in children such as: history of recurrent wheezing, history of chronic cough, history of tightness of the chest, and symptoms that worsen with exertion, viral infection, and exposure to environmental allergens (pollen, dust mites, molds, and pets). Irritants such as tobacco smoke or airborne chemicals can also trigger wheezing in patients that are at high risk for the diagnosis of asthma. Finally, emotional stress could be a triggering factor of wheezing in some patients. One should keep in mind that the differential diagnosis of asthma in infants and children may include the presence of a foreign body, vocal cord dysfunction, laryngeal tracheomalacia, cystic fibrosis,

viral bronchiolitis, and gastroesophageal reflex disease (GERD). It is important to know that FEV1 could be normal even in the patient with severe persistent childhood asthma. However, FEV1/FVC decreases as asthma severity increases. Pre and post bronchodilator evaluation can be obtained in children with improvements of more than 10% in FVC and FEV1 and 25% for FEF25-75% which is considered to be clinically significant for the diagnosis of asthma. Evaluating the production of Fe-NO (nitric oxide) is important to determine the degree of bronchial inflammation and to provide appropriate anti-inflammatory treatment. All patients with a potential diagnosis of asthma should have a complete allergy evaluation. The management of asthma consists of pharmacotherapy that includes the use of inhaled corticosteroids; now they are considered as first line prophylactic therapy in all age groups. Long acting beta2 agonists could be used exclusively with inhaled corticosteroids, but should not be used as a single treatment for bronchial asthma. Leukotriene modifiers have been shown to be effective, but much less than inhaled corticosteroids. Immune modifiers, such as omalizumab (Xolair), could be helpful in some adolescents with difficult to treat recalcitrant asthma. Allergy immunotherapy has been shown to be very effective in patients with atopic asthma. Furthermore, addressing environmental control, psychological factors, and asthma education, to include instruction on appropriate technique of inhaler use, are all crucial for successful treatment. Numerous studies revealed that the majority of patients have unstable asthma with increased rate of morbidity and mortality mainly due to poor compliance (33% compliance) and incorrect inhaler technique. The use of peak flow meters and a written asthma action plan (green, yellow, and red zones) are also a part of successful asthma management. Regular follow-ups and appropriate titration of treatment regimen is extremely important in order to control airway inflammation and ultimately prevent irreversible lung damage.

Hall G Session 2
Plenary Session: Bone Marrow Transplantation in Children

401
Haematopoietic Stem Cell Transplantation (HSCT) for Metabolic Disease

Colin Steward MD (UK)

In 1980 Professor John Hobbs first proposed bone marrow transplantation as a permanent treatment for lysosomal storage diseases (LSD). One year later he reported the first successful procedure in a child with Hurler's Syndrome. His team and others were subsequently able to show major therapeutic effects, including normalisation of enzyme levels and major improvements in respiratory status, corneal clouding, hepatosplenomegaly and intellectual stabilisation. This set the scene for what has become a major modality of treatment for patients with Hurler's Syndrome and a small selection of other LSD, together with the peroxisomal disease adrenoleukodystrophy. However longer term follow-up revealed that HSCT in these diseases is not truly curative. The beneficial effect on the CNS relies on replacement of brain microglia with healthy donor cells in order to get donor enzyme through the blood brain barrier; this turnover is slow, so that intellectual stabilisation can take 1-2 years. The effect on bone disease (dysostosis multiplex) is also limited and children with Hurler's Syndrome will usually need multiple orthopaedic procedures after transplant. In some conditions, such as Hunter (MPS II) and Sanfilippo (MPS III) Syndromes, there is no convincing evidence of benefit. In the long term this has placed emphasis on careful selection of patients appropriate for transplantation, and on their early identification and transplantation, optimal donor choice and preparative therapy, together with careful multidisciplinary post-transplant management. This lecture will review the diseases appropriate for transplantation, discuss potential risks and transplant optimisation and explore the potential future role of enzyme, drug and gene therapy.

402
BMT for Haemoglobinopathies

Ayad Ahmed Hussein MD (Jordan)

Thalassemia major and sickle cell disease are the two most widely disseminated hereditary hemoglobinopathies in the world. The outlook for affected individuals has improved in recent years due to advances in medical management and attention paid to prevention and treatment of complications. However, hematopoietic stem cell transplantation (HSCT) is currently the only curative option. The use of HSCT has been increasing, and the outcomes today are much improved in the last three decades, with more than 90% of patients surviving transplantation and more than 80% of them being disease-free.

Hemoglobinopathies are common in the Mediterranean region, Middle East and Africa. In many of these countries; the delivery of the regular treatment and adequate supportive care such as safe blood transfusion and aggressive chelation therapy is often problematic which leading to poor survival with medical therapy and can negatively influence the outcome following HSCT. Also; because of various socio-economic factors; patients are often referred late for transplant in their disease process. To improve the outcome following HSCT; we have adopted at KHCC a novel risk adopted approach by using a reduced intensity preparative regimen for high risk patients and fully ablative conditioning for low risks patients.

403
Recovery of Neutrophil Function by Hematopoietic Stem Cell Transplantation

Adel M. Al-Wahadneh MD (Jordan)
Mohammed Mutaereen , Adel Alwahadneh, Mohammad Abu-shoukear, Zeyad Habahbeh, Read Zyoud, Hiffa Bin-Dahman

Background: Inherited neutrophil Disorders are a heterogeneous group of diseases that are characterized by increased susceptibility to serious and life-threatening infections and non-infectious complications. Hematopoietic stem cell transplantation (HSCT) is a curative option for these disorders.

Patients and Method: We retrospectively reviewed the charts of 15 consecutive patients who underwent HSCT for inherited neutrophilic disorders in king Hussein Medical Center/Queen Rania Children Hospital (KHMC/QRCH) in Jordan between 2004 and 2012. Data were obtained from KHMC/QRCH data base. The total number of patients was 15. The total number of transplant was 17. Nine patients (60%) were male and six patients (40%) were female. Diagnoses were chronic granulomatous disease (CGD) (n=6, 40%), Chediak-Higashi Syndrome (n=2, 13%), Griscelli Syndrome type II (GS II) (n=1, 7%), Leukocyte Adhesion Deficiency type I (LADI) (n=5, 33%), Severe Congenital Neutropenia (SCN) (n=1, 7%). Pre-transplant comorbidities include invasive fungal disease in CGD patients, fasciitis in LAD I patients and accelerated phase in patient with CHS and GS II.

Results: the total number of transplant was 17, two patients needed second transplant for primary and secondary graft failure respectively. The median age for transplant was 3years (0.3-12 years). Two-third of patients received transplant from matched sibling donor and the remaining from Matched family donor (at least 8/8 Loci). HSCT sources were bone marrow (n=13, 76%), including RBC-depleted, and peripheral blood stem cell PBSC (n=4, 24%). Cyclophosphamide-based myeloablative conditioning regimen was used in four transplants. In 12 transplants Fludarabine-busulfan-based regimen were used with or without Rabbit ATG and only one transplant was carried out without conditioning. Cyclosporine was used for the prophylaxis against GVHD in majority of transplants (n=15, 88%) while tacrolimus was used in only 2 transplants. Second agents include MMF (n=13) and MTX (n=4). The total number of CD34+ cells infused on day 0 ranged from 2.5 to 10 X 106/kg (median, 5.5X106/kg). The total events of acute GVHD was 6 (35%) with stage I-II in majority of patients. All patients were engrafted except two who had primary and secondary graft failure respectively and underwent successful 2nd transplant from the same donor. The median time of myeloid engraftment was D +13 (11-15) and of platelet engraftment

was D+15.5 (11-60) post transplantation. Fourteen patients are alive and they have achieved full chemerism. Normal neutrophils function and number have been achieved in all live patients. Only one patient died due to non transplant-related mortality.

Conclusion: We conclude that HSCT can recover impaired neutrophil function in patients with inherited neutrophil disorders. An interesting finding in our retrospective study is the successful use of newly established Fludarabine-based regimen

404
Bone Marrow Transplantaion for Solid Tumors

Isam Hadadin MD (Jordan)
Isam Haddadin, Mufeed Hamoury, Rami Majaly, Fareed Haddad, Maher Khader, Omayma Jarah

High dose chemotherapy with autologous stem cell rescue is now widely used treatment modality in various childhood solid tumors with varying degrees of success.It is most commonly used in children with advanced Neuroblastoma
At Queen Rania Abdullah Hospital we transplanted 22 children with different hematological and malignant diseases over the last 2 years.

5 children with Thalassemia major
7 children with Bone Marrow Failure
6 children with Leukemia
4 children with Stage 4 neuroblastoma

The success rate is in the range of 64%
In this review we will discuss the benefit of autologous BMT in different types of solid tumors

405
Late Effects of Haematopoietic Stem Cell Transplantation (HSCT) in Children

Colin Steward MD (UK)

HSCT provides remarkably successful treatment for children with a wide range of otherwise lethal malignant and non-malignant conditions, and most patients enjoy a good quality of life after transplant. However, few will escape all of the potential late effects of the procedure itself and its interplay with their underlying disease and previous therapy. Some of these effects (e.g. problems/ failure of the endocrine, cardiac, gonadal, dental or renal systems, and second malignancy) result principally from the use of high dose total body irradiation during conditioning therapy. Others, such as chronic graft versus host disease (GVHD) or susceptibility to infection, result from immune allorecognition of host tissues by incoming donor immune cells or the deleterious effects of graft manipulation and post-transplant immune suppression. GVHD and its therapy also play a pivotal role: osteoporosis, aseptic necrosis or cataracts can result from steroid therapy and chronic GVHD can result in bronchiolitis obliterans. In order to optimise quality of life it is essential to monitor and manage growth, puberty, fertility, thyroid function and to screen for secondary malignancies. This requires close partnership between transplant physicians, organ-specific specialists and local care providers. Late effects are, however, also an area where prevention is better than cure. Thus avoidance of these effects places heavy reliance on optimising selection of the stem cell donor, stem cell source and GVHD prevention. It is also crucial to use the minimum essential doses of chemotherapy, to avoid radiotherapy wherever possible and to tailor the conditioning chemoradiotherapy to the underlying disease.

406
Stem Cell Work in Jordan: Current Status 2012

Abdalla Awidi Abbadi MD (Jordan)

There is considerable interest in stem cell work and research in Jordan for the last few years. This interest has ranged from being of pure commercial nature without evidence based practice, to more ethical and academically sound work.
The Cell therapy Center (CTC) is a stand alone not for profit center located in the campus of the university of Jordan and totally owned by the university. CTC has been engaged in several preclincal projects

and has conducted clinical study related to stem cell or cell products. It is curently heading towards conducting several clinical trials related to the properties of immune suppersion related to mesenchymal stem cells of various origins.
The center is planning to be able to provide important clinical grade cells, tissues and possibly organs within the coming few years, in order to help patients in Jordan as well as visiting patients. Some of these products are near maturity.
A new building is under construction to house these activities. The building will house a large GMP facility, capable pf producing clinical grade products, as well as several up to date laboratory facilities.
A detail discussion of the CTC activities wil be presented. Abdalla Awidi Abbadi. MD.FRCP. Professor and CEO of CTC, University of Jordan, Amman, Jordan

Hall G Session 3
Pediatrics

407
Eosinophilic Esophagitis: Therapeutic Innovations
Talal Nsouli MD (USA)

Eosinophilic esophagitis (EE) is caused by infiltration of eosinophils (>15 eosino/ high power field) in the esophageal mucosa. EE is usually triggered by food allergens and aeroallergens. Several research studies revealed that EE is a Th2 driven inflammatory disorder where IL5 and IL13 play an important role. IL5 is known to stimulate the differentiation, maturation, replication and migration of eosinophils resulting in significant inflammatory process. IL13 stimulates the production of eotaxin-3 causing significant inflammatory process. The presenting symptom of EE varies depending on age. Symptoms usually appear in chronological order as follows: -1 feeding disorders, -2 vomiting, -3 abdominal pain, -4 dysphagia, and -5 food impaction. The evaluation of a patient should include a complete allergy evaluation consisting of allergy skin testing and/or in vitro specific IgE to foods and inhalants. More than 0.75 of patients with EE showed significant endoscopic amelioration after an elimination diet of the specific food allergen based on the allergy evaluation. More recent studies have been showing that aeroallergens in patients with severe environmental allergies contribute to EE. In addition to the environmental control and elimination of the potential food allergen, patients require a treatment with topical corticosteroids. Oral corticosteroids could be used in patients with severe exacerbation of EE. Inhaled corticosteroids, such as fluticasone, should be used without spacer. Therefore, patients should be trained to swallow fluticasone rather than inhaling it. Swallowed fluticasone delivered by an MDI usually is extremely safe since this pharmacological agent undergoes first pass metabolism in the liver following gastrointestinal absorption. One potential complication that might occur from EE left untreated could be progressive scarring/fibrosis leading to irreversible damage of the esophagus and dysfunction (esophageal remodeling). More recent studies suggest that some of these patients may develop Barrett's esophagitis when EE was associated with GERD at a more accelerated pace than GERD alone. Hence, one should consider using a proton pump inhibitor. Other potential future treatments include monoclonal antibodies such as anti-IL5 called reslizumab (TEVA) and anti-IL13 called lebrikizumab (Roche). Finally, patients with EE should have careful and routine evaluation and monitoring of their complete gastrointestinal tract by endoscopy.

408
Cow's Milk Protein Intolerance - A Practical Guideline
Robert Heuschkel MD (UK)

The lecture will cover the diagnosis and management of non-IgE mediated cow's milk protein allergy (CMPA). The aim is to provide an overview of current practice, relevant to clinicians and allied health professionals dealing with this group of children. IgE-mediated food allergy will not be covered.
Increasing numbers of infants and children appear to be intolerant to dairy protein. The cause for this remains unclear. There have been a number of recent publications

outlining best practice for the management of children with this diagnosis. These are highlighted in the practical guidelines published by the ESPGHAN GI Committee in 2012 (see ref). There are now clear and agreed diagnostic criteria for this condition. The talk will cover the epidemiology of CMPA and discuss the importance of an accurate diagnosis. The diagnosis by elimination and challenge will be reviewed, with discussion of the timing and duration of each stage.
The management of infants and young children with different formulas, the indications for amino acid feeds, and the duration of therapeutic elimination will be reviewed.
Finally the ESPGHAN diagnostic algorithm will be compared and contrasted with clinical practice in Cambridge. The importance and practicalities of re-challenge will also be discussed.

409
Advances in Allergy Immunotherapy

Talal Nsouli MD (USA)

This is the 100-year anniversary of allergy immunotherapy. New studies demonstrated that subcutaneous immunotherapy (SCIT) has been more effective and safer than in the past with an extremely low rate of systemic reaction as low as 0.1%. Allergy immunotherapy is indicated in the management of IgE-mediated disorders, including allergic rhinoconjunctivitis, allergic asthma, Hymenoptera and fire ant hypersensitivity. The mechanism of action consists of an increase in T regulatory cells (Tregs, CD 25+); this will result in an increase of IL-10 that is known to inhibit the Th2 immune response. Furthermore, there is an increase in TGF beta that also decreases the Th2 response. In addition, during allergy immunotherapy Tregs stimulate production of IL-12 up regulating the Th1 pathway. Th1 cells produce interferon gamma (INF gamma) inhibiting the Th2 allergic response. Furthermore, there is an increase in allergen specific IgA and IgG levels, particularly IgG4. Recent studies showed that allergy immunotherapy could also be effective for the treatment of atopic dermatitis and mosquito hypersensitivity. Immunotherapy augments T regulatory cells, resulting in an increase in IL-10 that is known to inhibit the allergy presenting cells. It also inhibits the activation and survival of the eosinophils. In addition, it inhibits activation of the mast cells. The T regulatory cells are known to produce a class switch of IgE to IgG4 and IgA affecting the B cells and to inhibit the growth and activation of the T cells, collectively resulting in significant clinical improvement and in some cases long-term remission. Allergy immunotherapy may have a long-lasting effect up to twelve years. It also prevents the development of allergic asthma and acquiring new allergies, making it an outstanding therapeutic modality for patients with allergic disorders. It is important to provide allergy immunotherapy in a medical setting where an anaphylactic reaction could be treated effectively by a well-trained medical provider in the presence of epinephrine, injectable antihistamines, IV fluids, corticosteroids, and oxygen. Finally, allergy immunotherapy is the only therapy that produces immunomodulating effects for allergic diseases and provides the closest treatment to eventually cure allergic disorders. It is shown to be cost effective and generally safe. Future investigation and research should focus on the development of safer and more effective standardized allergenic extracts utilized for the optimal treatment of patients with atopic diseases.

410
Optimizing Care in Childhood IBD

Robert Heuschkel MD (UK)

This talk will highlight how to make best use of both medical and surgical treatments in the care of children with IBD. The use of exclusive enteral nutrition as an induction therapy in Crohn's disease will be reviewed briefly. The evidence for earlier use of immunosuppression in both Crohn's Disease and Ulcerative Colitis will be discussed, with a review of current UK guidelines and how these are applied in everyday clinical practice.
Current indications for biologic therapy are reviewed, as well as a discussion of safety issues and treatment strategies following anti-TNF resistance.
I will review the pros and cons of surgery

in children with more severe IBD, with insights from personal practice in a multi-disciplinary team over the last 15 years. The role of nutrition and surgery in the management of growth failure in IBD will be highlighted.
The management of acute severe colitis has recently been critically assessed and new guidance made available. Key aspects of this data will be presented.

Hall G Session 4
Pediatrics

411
Barth Syndrome: Rarely Recognised but Frequently Fatal

Colin Steward MD (UK)

Barth syndrome (BTHS), resulting from mutations of the TAZ gene, was first described in 1983 as a cause of X-linked dilated cardiomyopathy, skeletal myopathy, growth delay, neutropenia and frequent death in infancy due to infection or cardiac failure. Fewer than 200 cases worldwide have been diagnosed, but evidence is accumulating that the disorder has been substantially under-diagnosed. Two factors are responsible for this greater recognition: the availability of better screening tests and identification of a wider phenotype. The latter now includes ventricular arrhythmia, sudden cardiac death, prolonged QTc interval, delayed motor milestones, lethargy and fatigue, lactic acidosis, constitutional growth delay, feeding problems, failure to thrive, episodic diarrhoea, characteristic facies and male fetal death and stillbirth. This broad range of problems make this a disease that should be known to both general and specialist paediatricians. There are many pitfalls in identifying patients. Diagnosis previously relied on identification of relatively subtle increases in urinary excretion of 3-methylglutaconic acid (3-MGCA). However, some children with BTHS lack increased 3-MGCA, others are never neutropenic and a minority has occult or absent cardiomyopathy. Fortunately, it is now known that the acyltransferase encoded by TAZ fundamentally affects the remodeling of cardiolipin phospholipids in mitochondrial membranes, and this has allowed the recent development of a biochemical cardiolipin test applicable to blood, tissues or even dried neonatal bloodspots. Management of BTHS includes medical therapy of cardiomyopathy, cardiac transplantation, antibiotic prophylaxis and granulocyte colony-stimulating factor (G-CSF) therapy. Careful multidisciplinary care is allowing many more individuals with BTHS to live into adulthood.

412
Managing Acute Colitis in Children with IBD

Robert Heuschkel MD (UK)

This talk will highlight how to optimize the medical and surgical management of children presenting with acute colitis and acute severe colitis (ASC).
Acute colitis is most often medically managed, although treatment resistance may lead to planned surgical intervention.
ASC is one of the few emergencies in paediatric gastroenterology and hence requires accurate diagnosis, close monitoring, appropriate investigation and prompt management. Although most often this occurs in children with ulcerative colitis, it may also occur in children with extensive colonic Crohn's disease.
I will present the diagnostic work up necessary in children presenting with ASC, including the indications for endoscopic investigation and imaging. I will discuss the importance of using a validated tool (PUCAI) to assess disease progression and the need for surgery.
I will discuss the evidence for different first-line therapies and the role and importance of nutrition in this scenario.
Of critical importance is the close collaboration between the paediatric gastroenterologist and an experienced surgeon, ensuring a multi-disciplinary approach to decision making that includes specialist nurses and stoma therapists.
I will briefly discuss available surgical interventions, their post-operative care and follow up.

413
Pediatric Cancer Incidence and Survival 2000-2009 for Jordanian Population

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Objectives: This study is to explore epidemiology and trends of pediatric cancers in Jordan 2000-2009 and to identify the observed survival rate for childhood cancer.
Methods: descriptive study done , cases were identified from Jordan cancer registry ,all Jordanian pediatric cancers which diagnosed between 2000-2009 were included ,data on age, sex, primary site, morphology ,vital status (alive, dead) ,date of last visit were collected, SPSS software used for analysis & Kaplan Meier method was used to calculate five and ten years survival rate
Results: There were 2049 (4.5%) registered malignant tumor during the period 2000-2009 .Crude incidence rate for cancers is 92.8/million in children. It is more common in males, M:F ratio 1.4:1, The highest percent for pediatric cancers was seen in the age group 0-4 years 41%. The most common types of cancers was leukemia (32%),brain and CNS (18%), Lymphoma (15%). Five and ten years Survival rate for pediatric cancers is 79.8 %, 76.7% respectively. Survival rate was best seen in lymphoma patients 90%, and the poorest survival rate was seen in bone cancers patients(70%.)
Conclusion: the pattern of childhood cancer in Jordan seems to be similar to other countries in our region, where leukemia ,lymphoma and brain &CNS were the most common cancers in Jordan and countries in the region ,although survival rate is slightly better in Jordan than in other countries in the region

414
Growth Hormone Therapy Update

Mjalli Ahmad Hasan MD (Jordan)

Growth hormone (GH) is produced by Somatotropes cells of the anterior pituitary gland which accounts for more 50% of pituitary volume and the GH is considered as the most abundant pituitary hormone. There are approximately 10 intermittent pulses of GH secretions per day, mostly with the onset of sleep. GH secretion is directly controlled by hypothalamic and peripheral factors; it is stimulated by physical activity, deep sleep and high protein intake. The effect of GH results in increase in linear body mass, linear growth, and an increase in organ size and their function as well of decreasing the adiposity. Peak growth rates occur during midpuberty. Apart from GH other hormones play role in the growth mainly thyroid hormones and sex hormones.
The prevalence of GH deficiency (GHD) is approximately 1 in 4000 individuals. Children suffering from a complete GHD usually diagnosed before 3 years of age, while less severe cases may not be identified until puberty.
GHD can be of genetic or acquired form, and the definitive diagnosis of GHD requires demonstration of absent or low levels of GH in response to two stimulation tests. Although GH provocative tests are not necessary before initiating GH therapy in children with Turner syndrome, chronic renal insufficiency, Prader Willi Syndrome, and children with short stature secondary to being born SGA. Additional pituitary functions should be evaluated in children.
Leukemia, a major safety issue initially believed associated with recombinant human GH administration has not been confirmed, but other signals, including risk of second malignancies in patients previously treated with irradiation, have been detected or confirmed after more than 20 years of treatment.

Hall H Session 1
Community Medicine

415
Sentinel Surveillance for Severe Acute Respiratory Infections in Jordan

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Objectives: To describe the epidemiology

and etiology of SARI in Jordan • estimate the proportion of SARI attributed to influenza and other pathogens and build local capacity related to epidemiology and surveillance

Methods: Initiatied November 2007 at 4 sentinel sites Hospitalized patients are enrolled upon meeting case definition. • Demographic and epidemiological data are recorded. Nasopharyngeal and oropharyngeal swabs are collected from each patient. Specimens are analyzed via Real Time PCR for: Influenza A and B, and other pathogens

Results: A total 755 patients were enrolled. • Among enrolled patients, 61% were males, 73% were children under 5 years old, and the median age was 1.3yrs •Seven-hundred and fifty samples were tested using Rt;PCR. •Results showed that 59% of all samples tested were positive with a viral etiology •Influenza had a distinctly seasonal pattern, with peak activity occurring around January. •Respiratory Syncytial Viruses (RSV) accounted for 25% of the positive Severe Acute Respiratory Infections (SARI) specimens. •Children under 5yrs accounted for a significant percentage of total positive samples (84.3%) and RSV cases (95%).

Conclusion: •SARI infections were significantly more common in children under 5 years old. •Children less than 5 yrs admitted to sentinel hospitals in Jordan with acute respiratory infection commonly suffered from RSV. •There is seasonality of Influenza and RSV in the winter months with peaks from December to March •A second peak of influenza cases occurred between May 2009-Nov 2009, reflecting the introduction of pandemic Flu A1 (H1N1)

416
Pandemic Influenza (H1N1) 2009: Jordan Experience

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Objectives: To highlight the epidemiological profile of the pandemic in Jordan

Methods: All laboratory confirmed cases by Rt- PCR and reported to the Ministry of Health were included in this study during the period from 15-6-2009 to 21-12-2009.

Results: A total number of 3048 confirmed cases of the diseases were reported to the Ministry of Health. Age of patients ranged from two weeks to 99 years (median= 15 years). Males accounted for 53%of cases. The epidemic curve peaked during October. Majority of cases treated in hospitals of Ministry of Health and Royal Medical Services (73% and 12% respectively).Reported deaths were only 16, and 13 of the 16 were in serious condition on admission.

Conclusion: The study highlighted the magnitude of the pandemic in Jordan

417
Acute Viral Kerato–Conjunctivitis: an Outbreak in July-August 2010

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Objectives: To clinically describe an outbreak of acute viral Kerato-conjunctivitis which occurred at a Military Training School in Zarqa and to specify the etiology of the disease on the clinical basis at Prince Hashem Military Hospital (PHMH) July to August 2010.

Methods: Material and Methods: A total of 59 trainees were interviewed and referred to the Ophthalmologic clinic at Prince Hashem Military Hospital (PHMH) during the outbreak of the disease July -August 2010.

Results: Result: All cases are males with age range from 18-24 years (mean age 21 years), maximum number of cases seen at two days of onset of symptoms. All 59 (100%) had red eye, 89.8% had pain, 86.3%had foreign body sensation and 87.5% had discharge. Bilateral involvement was seen in 73.5% and unilateral involvement in 26.5%, 43% of the total cases had corneal involvement and 20% of the cases had associated fever and periauricular lymphadenopathy.

Conclusion: The outbreak of Kerato-conjunctivitis observed at the time of study was viral in origin based on clinical analysis and literature review. Adequate personal hygiene, hand cleanliness and avoiding

overcrowding in barracks can minimize the outbreak spread.

418
The Coverage Rate of Hepatitis B Vaccination among Health Care Workers at Health Care Centers versus Hospitals In Irbid - Jordan

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Objectives: To compare the coverage rate of hepatitis B vaccination and to identify reasons for non vaccination among health care workers in hospitals versus health care centers- Irbid
Methods: A cross sectional study was done at King Abdullah University Hospital and all comprehensive health care centers in Irbid governorate. A total of 950 Health Care Workers were interviewed using a structured questionnaire to find out the vaccination status and reasons for non-vaccination or not completing the three doses of vaccination
Results: Out of 950 participants; 436(46%) completed the series of vaccination against Hepatitis B. Vaccination uptake was higher among vaccines in hospitals(50.6%) than health centers(31.7%).The coverage rate was highest among physicians(73%) and lowest among service workers(23%). Among those who completed the series of the vaccination;377 (86.5%) were above high school graduates. The female service workers had higher coverage rate than male workers. Ninety-two percent of those who did Hepatitis B titer have positive results and only 1.4% have positive hepatitis B surface antigen. The reasons for non or partial vaccination were lack of awareness (46.9%); lack of the availability of the vaccine (28.9%);fear of injection (12.6%) and vaccine side effects (11.6%).
Conclusion: Despite the availability and accessibility of a cost effective Hepatitis B vaccine since more than 2 decades, the vaccination coverage among health care workers is low. Health education needs to be improved and should concentrate on the importance of the vaccine in the prevention of the disease and its complications.Health care centers and hospitals should make sure that hepatitis B vaccine is always available to be used.

419
The Importance of Waist Circumference for Screening of Diabetes

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Objectives: to measure the best waist circumference cutoff value in recently diagnosed diabetic patients.
Methods A total of 1161 patients were interviewed in the nutritional advise clinic at Prince Rashed Ben Al-Hassan Military Hospital, Irbid, North of Jordan, in the period between June 2010 and October 2011, their age ranged between 9 and 76 years (219 males and 942 females). All these patients have available excel database records include age, gender, weight, height, waist circumference, fasting blood sugar and serum lipids profile. Receiver Operating Characteristic curve analysis had been used to find the best waist circumference cut-off values with the highest sensitivity or/and specificity for prediction of diabetic patients.
Results: The prediction of diabetes has to be highly sensitive and specific, whenever waist circumference > 97 cm in males [The sensitivity 84.8% (95% confidence interval; 76.8-90.9%), specificity 43.9% (95% confidence interval; 34.3-53.9%)] and waist circumference > 94 cm in females. [The sensitivity 86.3% (95% confidence interval; 82.6-89.5%), specificity 35% (95% confidence interval; 31-39.3%)]. We found that 36.3% of newly diagnosed diabetic patients have metabolic syndrome.
Conclusion: Waist circumference is a simple, rapid and cost effective tool for screening diabetes and metabolic syndrome.

420
Sedentary Lifestyle among Adults - Jordan, 2007

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Objectives: This study aims to determine the prevalence of inactive Jordanian adults and to describe their demographic and behavioral characteristics.
Methods: The study utilized data from the 2007 Jordan Behavioral Risk Factors Surveillance Survey (BRFSS). Sample size was 3654.Respondents who spent more than 240 minutes of daily physical inactivity (sleep time not included) were considered to have sedentary lifestyle. The results were analyzed using SPSS software.
Results: The prevalence of sedentary lifestyle was (82.8 %, 2965), with mean sedentary time 587 min (95%CI 581-594). 52.6% of physically inactive adults were males, one third of them aged 35-44years. Sedentary lifestyle was reported by 30% of those with secondary educational level or higher. 37.6% of those with sedentary lifestyle were housewives and 37.5% were employees, 66% of them were overweight and obese. Of the physically inactive people 2.5%, 1.3% had reported history of heart failure and cerebrovascular accidents respectively. About 57% of them tried to engage more in physical activity and almost 75% of them had reported interest in improving dietary habits.
Conclusion: The majority of Jordanian adults were leading to sedentary lifestyle which emphasized that there is a public health problem. Significant number was attempting to lead healthier lifestyle. Therefore there is an urgent need to launch an applicable national plan that enables people to practice healthier lifestyle.

421
Epidemiology of Sharp Injuries at King Hussein Medical Center

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Objectives: To describe the frequency, distributions, and determinants of sharp injuries among Health Care Workers at King Hussein Medical Center.
Methods: A retrospective Chart review analysis of 193 sharp injuries report form of cases who were referred to Preventive Medicine Department between January 2006 to December 2011 from the different Departments at King Hussein Medical Center for prophylactic management and follow up were studied. The epidemiological aspects of the study population were described regarding occupational groups, site of the injuries, location of incidents, procedures under which sharp injury occurred, immunization status of the injured and viral status of the patients who caused the sharp injuries. Simple Descriptive Statistics (Frequency and percentages) were used to describe study variables.
Results: The highest number of sharp injuries had been occurred among house keepers; 85 cases (44%): nurses ;74 cases (38%). However, the lowest number had been occurred among physicians, 13 cases (6.7%). The commonest sites of injuries were in the left hand 91 cases (47.1%) while 86 cases (44.1%) occurred in the right hand. Medical waste collection, medications given to patients and blood withdrawing represented 42 %, 22.8% and 17.6 % consecutively are the commonest method of sharp injuries. Only 45%of those injured had complete series of hepatitis B vaccination, however 28% did not receive this vaccine at all , (27%) of known sources caused sharp injuries to Health Care Workers were positive for Hepatitis B Virus. A total of 94 cases (44.6%) sharp injuries were caused by known sources and the rest were from unknown sources.

Conclusion: Needle stick and sharp injuries are occupational health hazards in hospital setting .Health education is one of the major tool to minimize these hazards. An occupational health program for Health Care Workers should be reinforced by preventive strategies for Blood borne pathogen adopting primary and secondary preventive tools (health education, universal precautions, safety devices, appropriate medical waste management, and immunization).

422
Epidemiological Characteristics of Cancer in Jordan (1996-2009)

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Objectives: The main purpose of this paper is to provide health professionals, researchers and policy-makers and all others who are interested with detailed information about the most common types of cancer in Jordan and their distribution by age, gender, address. To describe the epidemiological features of Cancer in Jordan using 14-year data from the National Cancer Registry (NCR). Increased understanding of Cancer incidence trends over the years will contribute to better prevention and control efforts.
Methods: This is a descriptive review of cancer cases registered at NCR between January 1996 and December 2009. The age, gender, and tumor type were recorded.
Results: A total of 7966 recorded Cancer cases were reviewed. The average crude incidence rate was 66.2 per 100 000 for males and 70.0 per 100 000 for females (age-standardized rates: 119 per 100 000 adult males and 116 per 100 000 adult females). The 5 most frequently reported cancers among adult males were: lung (10.6%), colorectal (9.8%), leukemia (9.3%), urinary and bladder (8.6%) and prostate (7.4%). For adult females cancers these were: breast (32.0%), colorectal (9.0%), leukemia (6.7%), thyroid (4.9%) and corpus uteri (4.6%). Cancer rates have changed little since 1996.
Conclusion: Trends indicate the need to increase the prevention and control efforts of the National Cancer Control Program including early detection of cancer. Health professionals policy-makers and all other concerned stakeholders should cooperate to make early detection acceptable, available and affordable to all Jordanians.

423
Epidemiology of Imported Malaria Cases in Jordan Between 2000 and 2012

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Objectives: To determine some epidemiological aspects of imported malaria cases among Jordanians Peace Keeping Forces and Civilian who returned back to Jordan from endemic areas
Methods: This is a descriptive study which was conducted for the imported malaria cases registered at Malaria review and Bilharzias National Center - Ministry of Health (MOH) in Jordan. The study included all people registered and tested for malaria at Malaria center between January 2000 and May 2012 including all Jordanian Peace Keeping Forces. All subjects gave a peripheral blood sample to detect malaria parasite by thick smear method.
Results: From 2000 to 2012, out of 565000 thick blood smears, 1500 had a positive result (detection of malaria parasites) in their blood sample. Of the total number of 1500, 1125 (75%) patients were infected with Plasmodium vivax, 360 (24%) with Plasmodium falciparum, 15 (1%) subjects had infection with Plasmodium Malaria & Plasmodium Ovale. . The geographic distributions of these imported cases were mainly from West Africa (Congo, Ivory Coast & Liberia) and Haiti. Jordanian nationals were 1200 (80%), the majority of them were military personnel who participated in Peace Keeping Forces (PKF) all over the world. While 300(20%) were not Jordanian.
Conclusion: Malaria remains a constant health threat for travelers to Malaria endemic areas. The continued presence of imported malaria in Jordan calls for emphasis on effective prophylaxis

especially among Jordanian participants in Peace Keeping Forces (PKF) to prevent resurgence of this disease and to keep Malaria Disease under control

424
Frequency of Proteinuria and Hematuria among Children at Age of School Entry in Al-Zarqa City - Jordan 2010- 2011

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Objectives: This study aims to find baseline data on the frequency of albumin and red blood cells in the urine between provide the first-graders student, in the city of Zarqa and to detect and treat cases early.
Methods: All the 20 schools which had first primary class where selected with1080 students; 471 were males and 609 were females. A urine sample was taken during the presence of students in the school to conduct the examination in the first phase questioner. Second urine test was performed for those found to have problems in the urine two weeks after the first examination and were referred a Pediatrician in the hospital for further investigations, diagnosis and treatment.
Results: The study sample included 1080 students, 471 Male and 609 female. The response rate of the first test was 94.8%, In first stage, 102 students tests were positive, 39 Male (8.8%) and 63 female (10.84%). In the second stage, 102 students who have had the test positive in the first phase by the same first examination and the same criteria that 76 students (74.5%), including 32 males and also found 44 females the first phase and76 students were referred to conduct the examination in the third phase. The results of 25 students microscopic examination for urine found to have abnormal results, 14 (56%) males and 11(44%) females were tested for urea and creatinine in the blood and measuring blood pressure as well as ultrasound images.
Conclusion: The results of the study conclude that the presence of albumin in the urine in addition to other abnormal results such as the presence of red blood cells and white blood cells is a problem in the city of Zarqa. The study recommends further analytical studies in the governorate Zarqa and the Kingdom

Hall H Session 2
Plastic Surgery & Dermatology

425
Dual Plan Technique for Breast Augmentation with 3D Simulation and Measurement

Cemal Senyuva MD, Plastic Surgery (Turkey)

Dual plane breast augmentation concept first introduced by John B. Tebbetts in 2001 and reprinted in PRSJ in 2006. First, wide range of breast type is divided to 3 types. Type 1 breast is most routine breast; all of the breast parenchyma located above the inframammary fold, tight attachments at the parenchyma-muscle interface and areola-inframammary fold distance is between 4.0 to 6.0 cm under stretch. Type 2 breast has highly mobile parenchyma; most of the breast parenchyma located above the fold but looser attachments at the parenchyma-muscle interface (breast tissue is much more mobile anterior to the pectoralis major muscle and areola-inframammary fold distance is between 5.5 to 6.5 cm under stretch. Type 3 breasts are glandular ptotic breasts or constricted lower pole breasts; in glandular ptosis one-third or more of the breast tissue lies below of the inframammary fold, very loose attachments at the parenchyma-muscle interface and areola-inframammary fold distance is between 7.0 to 8.0 cm under stretch. Constricted lower pole breasts of all degrees, form mild to marked including tuberous breast, characterized by any combination of (a) tight, constricted lower-breast envelope (b) parenchymal maldistribution with narrow base width or (c) short areola-inframammary fold distance is between 2.0 to 5.0 cm under stretch.
According to the breast type, 3 different surgical dissection technique is applied. In DUAL PLANE 1 the retromammary plane is left intact, there is no dissection in that plane, the subpectoral space entered immediately. In DUAL PLANE 2 technique breast parenchyma-pectoralis muscle

interface is separated until the inferior border of areola level. In DUAL PLANE 3 technique breast parenchyma-pectoralis muscle interface is separated until the superior border of areola level.
Dual plane 1 is reserved for Type 1 breast, Dual plane 2 is reserved for Type 2 breast and Dual plane 3 techniques is indicated for Type 3 breast.
Modifications of tissue layers that contact the implant 'the pocket' and implant selection allow adjustment of soft tissue mechanics relative to the implant, enabling the surgeon to better control the implant-soft-tissue dynamics.
Preoperative Measurements
A combination of Academy Kliniken (Sweden) Method and Bodylogic System (Mentor, USA) has been used to make measurements and for implant selection.

426
Using Veinviewer Technology to Reduce Bruising During Facial Injections

Cemal Senyuva MD,Plastic Surgery (Turkey)

Facial injections such as botulinum toxin, is one of the most common aesthetic procedure. Side effects, which are generally minor and temporary, can be predicted from the mode of action (muscle paralysis) and chemical structure (protein) of the molecule, resulting broadly speaking in two major areas of side effects: paralysis of the wrong muscle group and allergic reaction. In cosmetic use, this can result in inappropriate facial expression such as drooping eyelid, double vision, uneven smile, or loss of the ability to close eyes. This will wear off in around six weeks.

Bruising at the site of injection is a side effect not of the toxin, but rather the mode of administration. Trauma of the injection needle to a small vessel causes hematoma. The blood that infiltrated the subcutaneous tissue lead to bruising which totally and spontaneously drains away in 7 to 11 days. Bruising is prevented by the clinician either by applying pressure to the injection site or cooling the injection site with icepack or air forced cooling device, but may still occur.

If the small amount of botulinum toxin is injected into the vessel, systemic effects do not occur due to the insignificant quantity of the product. However, this amount of toxin which has been carried away by the blood in the vessel, is not applied to the muscle being treated, leading to a diminished effectiveness of the application.

The Veinviewer (Christie Digital Systems USA, Inc.) is a new subcutaneous vein imaging device. The Veinviewer operates by illuminating the subject's skin with, near infrared (NIR) light. This NIR light penetrates skin and subcutaneous fat effectively because of the low absorption of these tissues in the NIR wavelength range. NIR light is absorbed or scattered in the forward direction by blood while it is scattered in all directions in skin and subcutaneous fat. Hence, blood reproduces as dark, while skin and fat appear lighter. The image reflected back from the subject is detected with a video camera. An IR filter prevents any visible light from reaching the video camera. The resulting NIR image is processed by a computer, and then projected back onto the subject's skin with a projector using green light.

Marks were made on patients' faces to indicate where the injections should be made, local anesthetic cream (EMLA) was applied to the marks and 20 minutes later Veinviewer image projected to those area to be treated. If the marks are close or overlay any vein visualized by Veinviewer the injection site is shifted to a neighboring area without vessel.

The Veinviewer is an useful method for increasing the safety of the application of botulinum toxin to the face, reduces the incidence of hematomas and bruising, and enhancing the effectiveness of the procedure. Other facial cosmetic procedures, such as hyaluronic acid and other fillers applications can also be performed by Veinviewer guidance.

427
How to Correct Facial Asymmetries with Botulinum Toxin

Anthony Benedetto MD,Dermatology (USA)

Facial asymmetry (FA) can result from many different causes, which will determine whether or not it can be corrected. One type of correctable FA is idiosyncratic or familial FA in which one of a pair of muscles on one side of the face can be comparatively stronger or weaker than its partner muscle on the contralateral side. To correct this type of FA, the hyperkinetic mimetic facial muscle(s) can be weakened with botulinum toxin, bringing it to the same functional capacity as its contralateral partner. In order to reverse a FA with botulinum toxin one must first identify the cause of the asymmetry. The types of FA that can be corrected by botulinum toxin are naturally occurring brow asymmetries and asymmetric smiles. Approximately 35-40% of all patients treated with botulinum toxin present at the first treatment session with naturally occurring asymmetric brows and less than 5% of all patients present with naturally occurring asymmetric smiles, which were successfully corrected by injections of botulinum toxin. There were no identifiable complications seen in any of the patients treated. Botulinum toxin is an effective, safe, and long lasting treatment for different FAs caused by idiosyncratic unilateral hyperkinetic mimetic muscles of facial expression.

428
Is it Possible to Perform Lower Eyelid Aesthetic Surgery without Considering Mid-Face?

Cemal Senyuva MD,Plastic Surgery (Turkey)

Hall H Session 4
Dermatology & Plastic Surgery

429
Dermatology in the Ancient Arab Heritage

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My lecture is about History of Arab Heritage in Dermatology, The Abstract can't be divided according to your classifications. Abstract The Arab Islamic Empire had spread since 622AD over almost half the Old World. The Arabs message to nation surpassed all ethnic, religious and national boundaries. It also carried to nations: culture, knowledge and sciences, and contributed to the development of medical sciences and in particular dermatology. Ancient Arab medicine was mainly unconventional alternative. It was characterized as metaphysical and sometimes gnostic. It was a result of merging old Roman and Greek sciences, mainly due to two famous scientists (1) Hippocrates (2)and (Galen) who composed many medical books which were, translated by Arab Scientists. Dermatology was on the top of specialties that Arab excelled in. In this presentation, dermatology in the ancient Arab heritage will be discussed. This will include unconventional cutaneous medicine practices in addition to what I gave it the terminology of "Observational Medicine" that include the discussion of different skin disease.
The Arab Islamic Empire had spread since 622AD over almost half the Old World. The Arabs message to nation surpassed all ethnic, religious and national boundaries. It also carried to nations: culture, knowledge and sciences, and contributed to the development of medical sciences and in particular dermatology.

430
How I Use Absorbable Fillers

Anthony Benedetto MD,Dermatology (USA)

There is now a multitude of different types of absorbable soft tissue fillers available worldwide for cosmetic use, which are very different from the traditional collagen fillers that have been used for many years for facial rejuvenation and are no longer available in the USA. The final results and their duration vary among the different fillers, and each one has their particular indication. Optimum results not only depend on the particular anatomical site in which a specific filler is placed, but also on the technique by which it is injected.

Absorbable fillers are preferred for their ease of use and adjustability of outcomes. The hyaluronans are noted for their local hygroscopic properties and are best utilized to enhance the lips and perioral area and filling concavities in the periorbital area. There are different types of hyaluronic acid fillers available in the USA, each with different rheology. Understanding their elasticity, viscosity and other physical and physiological properties can guide one how to choose the best hyaluronic acid product for a desired outcome.

The robust rheology of calcium hydroxylapatite makes it an excellent filler to inject into deeper tissue planes particularly in the nasolabial folds, marionette lines, along the mandibular border, and in the pre-mental, temporal, pre- and sub-malar areas. Recent, studies have found calcium hydroxylapatite to be especially useful in filling soft tissue contour loss in the center of the face. These newer injectable areas of the center of the face have been treated successfully without significant adverse sequelae producing immediate and natural looking results. For most patients, the effects of calcium hydroxylapatite can last up to one year or more when touch up treatments are given within the first six months of treatment.

431
Botulinum Toxin Treatment of the Face

Anthony Benedetto MD,Dermatology (USA)

Rejuvenating the face with Botulinum toxin (BTX) has become a new and rewarding way to eliminate facial wrinkles in a minimally invasive manner that is relatively quick and easy to perform. The key to a successful treatment of a patient's facial rhytides with BTX is the proper pre-treatment evaluation of the cause of those rhytides. Recently, injections of BTX in the upper, mid and lower face has complemented other facial rejuvenation techniques, by relaxing hyperkinetic muscles that either have caused excessive wrinkling at rest or a distortion and asymmetry of a particular anatomical site during animation. When planning a patient's facial remodeling with BTX, one should pay particular attention to the eyes and mouth, which usually reflect a patient's inner feelings and emotions to the casual observer. The periorbital area has a limited number of mimetic muscles by which a person intentionally or unintentionally expresses themselves. Asymmetries in this area are common and usually easy to diminish with injections of BTX. Because the perioral area is controlled anatomically by different muscles that function either independently or in unison with each other to create a sphincter of the lips, it can be somewhat challenging to produce a consistently uniform effect with BTX without disturbing the symmetry and function of the lips. Injecting perioral rhytides with BTX requires an expert knowledge of the muscles in this area that provide the synergistic functions of mastication, phonation, deglutition as well as the expression of emotion. An in depth evaluation of the patient with a corresponding management plan using BTX to reduce wrinkling in the perioral area is essential for successful rejuvenation of the aging face.

Hall I Session 1
Pharmacy

432
Pharmaceutical Care / Medicines Management - A Connected Health Approach

Prof James C McElnay (UK)

Over the past 20 years, pharmacists, working closely with physicians in both primary and secondary care, have embraced the concept of pharmaceutical care / medicines management in order to assist patients, with chronic illness,in getting the greatest benefit from their prescribed medicines. Integral to this enhanced pharmacist input to care provision has been the periodic assessment of clinical and humanistic outcomes, e.g. through the use of diary cards, questionnaires and clinical tests. Although such approaches have been shown to be effective, and have enhanced patient engagement with the management of their illness, new 'connected health' approaches, taking advantage of enhancements in remote monitoring and communication equipment, have the potential to further

enhance the process. For example, a patient could measure cardiac function daily at home using a device which connects wirelessly,via a home computer or smart phone, to a central server. The server could provide a supportive reply to the patient if results are within the desired range, or send an alert to the patient's pharmacist / physician (computer or mobile device) if outside the desired range. The latter 'trigger' would cause a member of the care teamto review the patient's test results on-line and contact the patient e.g. text or video message to their mobile phone or home computer (either bespoke or automated) or to have a telephone discussion with the patient regarding their test results and the management of their medicines.

The connection of patients, pharmacists and doctors though such a system has the potential to facilitate early patient interventions which could help prevent further health deterioration and potential hospitalisation. The present lecture will explore this 'connected health' approach as an extension to currently available pharmaceutical care / medicines management programmes.

433
Patient Counseling and Communication in Pharmacy "Patients as Partners"

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Objectives: 1. Describe the patient-pharmacist relationships. 2. State the pharmacist's role in disseminating patient e- Health. 3. Patient-oriented technologies and patient-pharmacist partnerships. 4. Define self care, literacy, and e-Health. 5. Describe risks associated with consumer e-Health searching and how to avoid those risks. 6. List and describe examples of credible patient e-health websites.

Methods: Background information: The institute of medicines report "Crossing the quality chasm" in 2oo1clearly explains that assuring better patient outcomes is only possible if the health care system will serve patients' needs, not professional, economic, or political interests. Pharmacists can play significant role in serving patient needs by involving patients as co-producers of quality care. Patients are the largest unused resource in health care and pharmacist will need to develop new ways of to interact adequately with patients in assuring optimal patients outcomes. Setting: Patients in primary care as partners of pharmacists in accessing personalized health services.

Methods: By reviewing the literature and based on experiences in developing new technology for sharing information, some recommendation will be presented on how to involve patients as partners.

Results: Pharmacists have developed new ways for communication with patients using various technologies (e.g ICT), but in most situations limited to a few applications, such as medication refills. They have shown to be responsive to all time for providing access to health care. They are able to support patients in exercising the degree of control that patients choose over the decisions that affect them, and provide opportunities to share tailor-made information in order to monitor and adjust the treatment plan and confirm evidence of treatment success. Patients have been shown to be partners of pharmacists by indicating incompleteness of medical records, and by communicating with pharmacists in order to have better clinical outcomes (e.g. blood pressure control).

Conclusion: Patients can be involved in developing new ways for pharmacists-patients interactions allowing them to be partners in pharmaceutical care. Pharmacists need to play a leading role in providing more opportunities for sharing information with patients.

434
Microbiological Profile and Antibiotic Sensitivity in the Burn Unit at Royal Rehabilitation Center - Royal Medical Services

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Objectives: To find microbiology profile and antibiotic sensitivity pattern in burn unit in Farah Center For Rehabilitation.
Methods: Prospective study was carried out using 2404 specimens: 1568-wound culture, 307 urine, 205 blood and 324 others from 404 patients during the period 2001- 2008. Bacterial culture was taken at 24hour, 72hour, and then every 3 days and was cultured to the antibiotic that the patient received, data was entered and analyzed by using SPSS version 10.
Results: The most frequent bacteria was pseudomonas (58%), staphylococcus aureus (10%), klebsiella (5.6%), candida (5.6%). Pseudomonas was most sensitive for Amikacin (51.6%), staphylococcus aureus was most sensitive for Vancomycin (87.5%), klebsiella was most sensitive for Amikacin (100%), candida was most sensitive for Diflucan (100%).
Conclusion: Antibiotic sensitivity is helpful in determining the appropriate antibiotic to use in initiation therapy.

435
Applications of Pharmacoeconomics

Dr Qais Al-Efan (Jordan)

Pharmacoeconomics principles and methods can benefit pharmacists in their daily practice settings. Applied pharmacoeconomics is defined as putting pharmacoeconomic principles, methods and theories into practice, to quantify the value of pharmacy products and services. Pharmacists are required to justify the value of products and services they provide. The primary applications of pharmacoeconomics in pharmacy practice include two basic areas: drug therapy evaluation and pharmacy service evaluation.

Hall I Session 2
Pharmacy

436
Improving the Safety and Effectiveness of Medicines in Children

Prof James C McElnay (UK)

There is a poor evidence base for the selection of medicines and dosages in paediatric patients and indeed a series of studies have shown that approximately half of the medicines used in paediatric hospital wards, and about 90% of medicines used in paediatric intensive care units, are either unlicensed or off-label. This is obviously an unsatisfactory state of affairs, depriving infants and children of evidence based pharmacotherapy. There are, however, ethical difficulties in performing traditional pharmacokinetic studies in children, not least from the multiple blood sampling that is required.
The present lecture will describe ongoing research at the School of Pharmacy, Queen's University Belfast on the development of dosage guidance for medicines normally used in an unlicensed fashion in children, utilising drug analysis in low volume samples (including dried blood spots) obtained from children, coupled with population pharmacokinetic analysis. Having obtained written informed consent, blood samples are collected from hospitalised neonates, infants and children (usually at a time when blood is being drawn for another purpose e.g. electrolyte analysis) who have been prescribed medicines outside their license in the study site hospitals. At the time of sample collection the child is examined by a trained nurse to evaluate beneficial and unwanted drug effects. A range of customised proformas have been developed to aid in this data collection. The blood samples are assayed for drug content using custom designed HPLC microanalyses. Data collected are subjected to sparse data analysis to allow pharmacokinetic profiles of the drugs to be developed.
The methodology described offers an ethical alternative to traditional pharmacokinetic dose ranging studies and can produce much needed information on safety and

efficacy profiles for unlicensed and off-label medicine use in children. The methodology is also currently being extended to allow evaluation of the toxicokinetics of excipients used in paediatric medicines and to the assessment of adherence of children to prescribed medicines in primary care.

437
A Pharmaceutical Perspective of the Treatment of Type 2 Diabetes in Kerala State, India

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Objectives: The present and future incidence of Type 2 diabetes in India is of serious concern . This study was designed to investigate how patients drug treatment, diet and lifestyle affected their ability to control their blood sugar values.
Methods: 131 randomly selected patients were asked to complete a questionnaire which included questions about their family history, age of first diagnosis, blood sugar levels, current drug regimens and diet as they attended their routine 1-3 month appointments in clinics in Trivandrum, Kerala state. Blood sugar levels were measured both fasting and non fasting states in all the participants. Where possible responses were analysed using SPSS (version 19).
Results: A positive family history occurred in 65 patients (50%) and the median age of first diagnosis was between 50-64 years. Very few patients actually knew their blood sugar levels and when measured the median fasting level was 6.99 mmol/l [range of 4.2 to 14 mmol/l] and the median non fasting levels was 10.84 mmol/l [range of 6.8 to 16.3 mmol/l]. All patients were taking medicines to alleviate their condition the majority (49/131) were taking glibenclamide and 34/131 were actually using insulin and 46% were also using Ayurverdic preparations. Dietary patterns were very variable throughout the 131 patients.
Conclusion: Even in closely monitored type 2 diabetes patients in Kerala state blood sugar control was less than adequate. The significance of this will be discussed

438
Bioequivalence Studies Regulation in Jordan

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Objectives: Bio equivalence studies for generic drugs is an essential and a prior requierment for drug registration in Jordan since 2000. Both local and foreign generic drugs evidence their efficacy and safety in order to be eligible for further assessment for thier quality through a suitable design and kind of study . The aim of presentation is to provide a review of the current JFDA bio equivalence guideline
Methods: Bio equivalence studies are submitted with the common technical document CTD and undergo evaluation through qualified committee according to Jordanian FDA guideline . The submission,evaluation and approval process criteria and statistical date will be presented
Results: All generic drugs submitted to JFDA undergo evaluation according to Jordanian FDA guideline which is in parallel with international (FDA, EMEA,...) regulations and updates. Statistics showes the number of CTD files submmied and the bio equivalence and bio waiver studies required accordingly and the percentage of accepted and rejected studies and discuss rejection criteria.
Conclusion: The current guideline for bioequivalence evaluation studies ensure the safty and efficay of generic drug submitted in jordan Which is equivalent to international regulation

439
Insulin Vials vs. Insulin Cartridges: Further Cost Considerations

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Objectives: To highlight further cost considerations associated with the wastage in the use of insulin vials and cartridges in the Jordanian Royal Medical Services.
Methods: Two random samples were selected from prescriptions dispensed for diabetic patients using insulin in January 2012 from the outpatient pharmacy in Al-Hussein Hospital, King Hussein Medical Center, Amman, Jordan. First sample was selected from prescriptions of patients using vials; second sample was selected from prescriptions of patients using pens and cartridges. Average costs for insulin and wastage were calculated per patient from the Royal Medical Services perspective.
Results: The average direct cost per patient using vials was JD 5.197 and for those using cartridges this was JD 22.135. The average wasted quantity per patient in the first sample was more than ten times that of the second sample. The cost of the average wasted quantity per patient in the first sample (1.022 JD) was more than the double that in the second sample (0.441 JD).
Conclusion: Although the direct cost of insulin per patient by using vials was lower than cartridges, there was a substantial reduction in the cost of wastage by using the cartridges in the Jordanian Royal Medical Services outpatients.

440
Effect of Smoking on Tacrolimus Trough Concentration and Renal Function in Jordanian Renal Transplant Recipients

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Objectives: To determine the impact of smoking on Tacrolimus trough concentration dose adjusted Tacrolimus trough concentration, Tacrolimus dose requirement, renal function and to evaluate the prevalence of smoking in Jordanian renal transplant recipients (RTRs).
Methods: A cross-sectional observational study was carried out to assess the impact of smoking on renal function and Tacrolimus trough concentrations in 57 RTRs aged 35.68±8.46 years and 59.6% were males. Posttransplantation renal function was analyzed based on serum creatinine and creatinine clearance. Demographic and clinical data were collected with a patient interview during their routine outpatient visits and from medical files.
Results: Twenty seven RTRs (47.3%) were smokers, while 30 (52.7%) were nonsmokers. Smoker recipients required 30% (0.21±0.08 mg/kg/day) significantly higher doses (mg/kg/day) than those of nonsmoker recipients (0.146±0.10 mg/kg/day) (p-value=0.02) in order to achieve target level of 5-7 ng/ml. At the same time smokers show (50%) lower dose adjusted Tacrolimus trough level (106.8±45.4 ng/ml per mg/kg/day) versus nonsmoker recipients (194.24±111 ng/ml per mg/kg /day), (p=0.007). Smokers show significantly higher serum creatinine than nonsmoker RTRs (p=0.005).
Conclusion: The present study finds that smoking is prevalent among Jordanian PTRs. Also the study concludes that Smokers RTRs require higher doses of tacrolimus than that of nonsmoker RTRs. Concurrently, smoker RTRs will show mean

dose adjusted trough concentration lower than that of nonsmoker RTRs. Cigarette smoking correlates with decreased renal functions (decreased creatinine clearance and increased serum creatinine) after transplantation. Therefore, every attempt should be made to encourage kidney transplant candidates to stop smoking.

441
Role of Drug Information Center in Developing Medical Practice

Dr Ali Rawahneh (Jordan)

First DIC was developed in University of Kentucky in 1960, and now 80 % of united state hospital have DIC , Importance of DIC emerging from the services provide . and it's now proven that DIC has positive impact on Medical Practice in terms of efficiency, cost and standards of service provided

Hall I Session 3
Pharmacy

442
Platform Technology for Oral Protein Delivery using Insulin as a Model Drug

Dr Adnan Badwan (Jordan)

Oral delivery of proteins are challenged by unfavorable conditions of Gastrointestinal tract and it's exposure to first pass effect in the liver. To overcome such barriers the formulated proteins must be protected to reach the blood stream and to minimize it's metabolism in the liver. The present strategy is based on solubilisation of insulin chitosan complex in a reverse micelle formed in Oleic acid.
The formed system was characterized by measuring it's particle size, viscosity, and molecular weights. Different factors influencing the size of the formed micelles and their integrity against simulated gastric and intestinal juices were studied.
The most optimum preparation was tested by orally delivered to rats and insulin absorbed was followed by measuring it's pharmacokinetics and pharmacodynamics parameters.
The packaged system proved to be appropriate to deliver insulin and other proteins having molecular weights less than 20 K Daltons. The formulated liquid dosage form was delivered to 50 healthy human volunteers and was compared with subcutaneous insulin injections. The introduction of glucose homeostasis principal was introduced in order to improve the present understanding of insulin oral delivery.
New strategies to advance the present knowledge about the insulin handling following its oral delivery is suggested.

443
Critiquing Pharmacoeconomic Literature

Dr Qais Al-Efan (Jordan)

Quantifying the value of pharmacy products and services using pharmacoeconomics is common. Many pharmacoeconomic analyses are published in primary literature sources. However, the eagerness to conduct pharmacoeconomic studies often exceeds the quality of these studies. To use the pharmacoeconomic literature, it must be critically evaluated for its quality and interpreted correctly. Therefore, pharmacists and decision makers should recognize pharmacoeconomic literature potential limitations before using it.

444
Patients' Experiences and Knowledge about Using Coumarin and Coagulation Test

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Objectives: To investigate the patients knowledge and views about using coumarine (warfarin) in Jordan.
Methods: Oral anticoagulation knowledge survey was designed after an extensive literature review. It contains 20 questions related to warfarin use and prothrombin (PT) and international normalized ratio (INR) test .The systematic random sampling method was used in sample selection and face-to-face interviews using standard questionnaires were administered to

determine the demographic characteristics, the patient's knowledge of warfarin therapy and compliance to therapy. The survey is distributed on a sample of randomly selected patients (n=125) treated in Royal Medical Services in Jordan.

Results: A total 117 completed the questionnaire. The majority (64%) of respondents reported receiving warfarin therapy for more than one month and they can distinguish between different strengths of warfarin tablets by color. Most of respondents (40 %) reported difficulty to maintain INR in normal range. The minority of the respondents indicated that vitamin K interact with warfarin and about one third of them reported that PT/INR test is a test used to monitor warfarin therapy and monitor for signs of bleeding at all times (21%).

Conclusion: There is an increasing need to introduce effective education programs to current patients in order to enhance and update their knowledge with regard to warfarin therapy and PT/INR test.

445
Supply Chain Management and its Impact on Health Care Quality among Private Hospitals

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Objectives: The main aim of the study is to clarify the effect of supply chain management's dimensions on the quality of health services' dimensions in private hospitals in Jordan from the perspective of the procurement officials. The study also aimed to clarify the differences in supply chain management and quality of health services due to (gender, age, education level, and years of experience in the field of supply).

Methods: The study sample consisted of (301) male and female employees in each of the departments of supply and procurement section distributors divided on (36) private hospital, in Jordan. The study tool has been prepared and constructed into two parts, the first part is to measure the supply chain and was divided into four dimensions: the relationship with suppliers, specifications and standards, delivery and after service supply. While the second part of the questionnaire, which measures the quality of health services was divided into four dimensions: the relevance, responsiveness, trust and security.

Results: The questionnaire was analyzed using the Statistical Package for Social Sciences and the study results showed an effect of the supply chain management's dimensions: the relationship with suppliers, the specifications and standards, delivery and after-sales service, on the quality of health services dimensions (convenience, responsiveness, trust, and security). On the other hand the results showed that gender, qualification, age, or experience had no effect on the quality of health services in private hospitals in Jordan

Conclusion: The above results indicate the necessity that hospital administrations in Jordan to take special attention to Supply Chain Management through its dimensions (the relationship with suppliers, the specifications and standards, delivery and after-sales service) and Quality Control of health services and its dimensions (convenience, responsiveness, trust, and security) since the questionnaire analysis obtained according to SPSS analysis gave medium results and accordingly has to be improved according to the current study.

446
Drug Counterfeiting in Jordan: A Recent but Growing Problem

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Objectives: to describe, evaluate and analyze the factors that have contributed to drug counterfeiting and the danger of using such drugs in Jordan and to suggest ways to combat the problem.

Methods: A questionnaire made up of both opened and closed questions was distributed. The sample size for this study was a total of 100 pharmacist randomly selected from three different fields of pharmacy. 62 copies were completed and

returned. The questions were analyzed by using the SPSS system

Results: It is a good sign that around 47 (76%) of pharmacists were aware of drug counterfeiting problem and the current laws and regulations in Jordan. However, there are conflicts in opinions about whether the regulations are extensive enough or not; 43 (54.8%) of pharmacists think that they are, and 27 (43.5%) think that they are not enough. Thirty two (51.6%) of the respondents think that drug counterfeiting is a least serious problem while thirty (48.4%) think it is a very serious problem. In addition to that, 34 (54.8%) think that it is difficult to invade Jordan by drug counterfeiting while 22 (35.5%) think that Jordan could be invaded easily.

Conclusion: Drug counterfeiting is a major health problem and has a major impact worldwide on public, pharmaceutical companies as well as governments. Developing countries seem to be mostly affected, and counterfeiters invade most drugs, especially those which are used for the treatment of serious diseases

Hall I Session 4
Community Medicine

447
Contraceptive Methods Among Women Attending The Jordanian Association for Family Planning and Protection in Amman

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Objectives: To assess the role of Jordanian Association For Family Planning and Protection (JAFPP)in improving family planning services in Jordan ,and to determine the relationship between contraceptive methods used and level of knowledge of women attending these centers according to background characteristics

Methods: A cross - sectional study was during the year 2003 on a non-randomized sample of 957 women aged 15 - 49 were interviewed using a questionnaire exploring the following items: role of JAFPP in family planning services, knowledge and importance of using contraceptive methods related to socioeconomic factors, types of contraceptive methods used, and side effects

Results: The results showed that about 65% of client came to receive one or more F.P services, 99.6 % knew about at least one method, and almost all clients 99. 8 % stated that F.P is important .The IUD was the most popular method used (59.6%) Efficiency was the most important reason for choosing modern methods.

Conclusion: More family planning educational programs is needed in public and private sectors to adopt healthier reproductive behavior.

448
The Effect of Paternal and Maternal Smoking Status of their Youth's Smoking Behavior among Jordanians

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Objectives: The current study was conducted to explore the relationship between youth smoking behavior and paternal and maternal smoking status in Jordan.

Methods: A nationally representative stratified multistage cluster sample design was utilized from the 2005 Communication Partnership for Family Health (CPFH) baseline cross-sectional survey (N=936). Youth smokers were defined as subjects who, at the time of the study, smoked one cigarette or more a day. Parental smoking was self-reported by both the father and the mother of each youth. Socio-economic factors were assessed using social class and maternal education. Logistic regression analysis was used to measure the adjusted Odds Ratios of youth smoking by the different independent variables.

Results: A total of 936 never-married Jordanian youth were interviewed. Females were excluded from the analysis as their smoking prevalence was only 2.4%. Overall, 28.1% of male Jordanian youth reported smoking. Maternal education

and paternal smoking were significantly associated with youth smoking status. Maternal smoking, SES, and the presence of a household smoke-free area were not significant predictors of youth smoking status.

Conclusion: Youth tobacco control programs should be multi component programs that not only include youth, but the whole family. Families, especially mothers, should be made aware of the effect that their smoking behavior has on their children's choice to remain tobacco free. As long as Jordan remains a family-unit collective society, only implementing school-based smoking prevention program will not suffice.

449
The Rate of Obesity and Metabolic Syndrome at Prince Rashid Bin Al-Hassan Military Hospital

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Objectives: To measure the rate of obesity and the metabolic syndrome in North of Jordan

Methods: this a hospital-based study which was conducted on a total 1161 subjects (219 men and 942 women) who attended the nutritional advice clinic at Prince Rashed Bin Al-Hassan Military Hospital, North of Jordan in the period between June 2010 and October 2011, their age ranged between 9 and 76 years. The measurements of height, weight, waist circumference, fasting blood glucose and serum lipids were transferred to Statistical Package of Social Science program; We measure the rate of obesity, based on body mass index >=30 (weight per kg/height square per meter) and waist circumference [>= 102 cm (males), >= 88 cm (females)], The rate of metabolic syndrome was defined by US National Cholesterol Education Program Adult Treatment Panel III criteria.

Results: Based on body mass index, the overall rate of obesity was (70.3%), the rate was (53.9%) in males and (74.1%) in females. Based on waist circumference, the overall rate of obesity was (80.4%), it was higher in women (85.7%) than men (58.0%). the overall rate of metabolic syndrome was (47.7%), it was (45.7%) in males and (48.2%) in females. metabolic syndrome central obesity, hyperglycemia, hypertension, and hypertriglyceridaemia increased with age.

Conclusion: In North of Jordan, rate of obesity are very high, Population-wide action is required to solve obesity problem.

450
Breastfeeding Practice among Women Attended Primary Health Care Clinic at Prince Hashim Bin Al-Hussein Military Hospital

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Objectives: To assess factors associated with breastfeeding among women attended Primary Health Care clinic at Prince Hashem Ben Alhussin Military Hospital.

Methods: Hospital-based study was conducted in the period between July 2010 and August 2011. A total of 332 women with children aged between 10 days and 37 months, who attended Primary health Care clinic for vaccination at Prince Hashem Ben Alhussin Military Hospital were included in this study. Standardized questionnaire was regarding participants' demographics and infant feeding.

Results: Full breastfeeding was reported by 15.7%, mixed feeding was reported by 39.8% and infant formula feeding was reported by 44.6%. Employed women two-fold more likely to practice full breastfeeding compared to unemployed women, and women who had caesarian delivery were also two-fold more likely not to practice full breastfeeding compared to those who had vaginal delivery.

Conclusion: This study showed that working women and those who deliver by caesarean section were less likely to breastfeed.

451
Surveillance and Epidemiologic Aspects of Malaria Cases in Jordan

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Objectives: To describe the demographic and epidemiologic risk factors of reported malaria cases in Jordan during the recent decades.
Methods: Records of malaria surveillance system at MOH were reviewed. A database of cases was created and retrospective analysis was performed.
Results: After eradication of malaria in 1970, 9 small epidemics of local introduced malaria were reported; the major outbreak was reported in 1990 in Al Karak Low Lands with 32 vivax cases. During the last two decades (1992-2011),2752 laboratory confirmed malaria cases were reported, 99.9% of reported cases are imported from abroad, the male to female ratio was 4:1, 84.7% of reported cases are in the age group from 20 to 49 years, of the total reported cases 1261(45.8%) were Jordanian and 811 (29.5%) were military personnel.
Conclusion: A strong malaria surveillance system is necessary to maintain Jordan free of local malaria transmission and reintroduction. Case detection and prompt treatment of are important strategies.

452
Prevalence of Overweight and Obesity among Military Personnel in the North of Jordan and Some Associated Risk Factors

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Objectives: Personnel to determine the prevalence of overweight and obesity among military personnel serving in North of Jordan and to investigate some of its associated risk factors.
Methods: A cross-sectional survey was conducted in army units .Multistage sampling technique was used to recruit 570 male participants, who then completed a self-administered questionnaire included questions about socio-demographic variables, the nature of work, exercise history, dietary and life style history. Anthropometric measurements were recorded to measure Body Mass Index.
Results: About 36% of participants were overweight and 16.8% were obese; the combined percentage of obesity or overweight among the study population was 53.1%.Subject at higher risk of overweight were those in the older age groups, had higher educational level, had low exercising score, agreed that they were gaining weight, had meals more frequently, tend not to be satisfied about their health and physical appearance. As for obesity subjects at higher risk of obesity were those who reported to be ever marries, in the higher educational category, live in the middle of Jordan, had low perception of their health status, strongly agree that they are gaining weight, had meals more frequently, complain about their health status, had a perception that they are gaining weight because of their unhealthy life style, and those who perceived that there are possibly getting out of shape.
Conclusion: According to the current finding; overweight and obesity pose a serious problem among military personnel in Jordan and there seems to be an urgent need to initiate and activate interventions.

Hall J Session 2
Psychiatry

453
ADHD Management Updates

John Fayyad MD (Lebanon)

Attention Deficit Hyperactivity Disorder (ADHD) is commonly encountered in schools and clinical settings, with many studies from the Arab World documenting its prevalence among children, adolescents and adults. This presentation will review clinical management strategies highlighting issues in diagnosis and testing, detection of comorbid psychiatric conditions and treatment. An update on various treatment interventions including

behavioural therapies and medication management will be presented. Guidelines for using stimulants and non-stimulant medication will be reviewed.

454
Violence Against Medical Personnel in General Hospitals

Mohammad Zaubi MD, Sebbah Merrafi-clinical Psychologist, Mohammad Aqeel, MD. Psychiatric Department,King Hussein Medical Centre. Amman (Jordan)
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Objectives: Violence is escalating in health care. It attracts the attention not only the Health care planners, media but the medico-legal system. Work-related violence is defined as any physical assault, threatening behavior, or verbal abuse occurring in the work setting. This presentation aims at scoping the situation at our hospitals on comparison to the developed countries.
Methods: Proposal at assessing risk factors, BioPsychoSocial determinants of violence including work related stressors and how communication skills affect the Violence in the Dr's Patient relationship.
Results: The annual rate of violence is reported to be 8.3 assaults per 10,000 Health Care Workers. However, the actual incidence rate of violence in our health care settings is likely to be greater due to lack of reporting. Violence is more common with Junior Dr's than Senior Staff. Over 30% of junior Dr's experience significant psychological distress.
Conclusion: Hospitals should develop and implement a plan to reasonably prevent and protect employees from violence including Administrative controls, record keeping & analyzing of Violence, Environmental designs and Behavior modifications.

455
Child and Adolescent Mental Health Services: Future Perspectives in the Arab World

John Fayyad MD (Lebanon)

Child and Adolescent mental disorders are among the most common medical conditions, and they interfere significantly with normal development, education, and relationships. They require special skills in diagnosis and management, yet there is an undersupply of specialists in child mental health in the world and particularly in the Arab world. This presentation will focus on a spectrum of services in child mental health ranging from outpatient community to inpatient tertiary care models. Dissemination of evidence-based interventions into resource-poor communities will be highlighted.

456
Dental Phobia among Patients Attending Dental Surgery Clinics

Mohammad Ali Zaubi MD
Psychiatric Department, King Hussein Medical Centre. Amman (Jordan)
mzaubi9@yahoo.com

Objectives: This investigation was conducted to quantitate the anxiety associated with third molar extraction among patients attending the oral surgery clinic and to compare the measured anxiety before and after extraction and between men and women.
Methods: The psychological test, State-Trait Anxiety Inventory (STAI) was given to 60 patients undergoing third molar extraction. The patients completed the test on the first examination (day 1), immediately before the extraction (day 2), and the day after the extraction (day 3).
Results: Results showed remarkable reduction in state anxiety scores (mainly stage 1V and V) on day 3 compared to the mean scores for days 1 and 2 although the difference between days 1 and 2 was not significant. There are no significant changes in the trait anxiety stages among days 1, 2, and 3. Women showed more anxiety state on day 2 than men.
Conclusion: State anxiety was more relevant than personality-related trait anxiety through out teeth extraction, both of which can be quantitatively measured using the STAI. Understanding the nature of such anxiety would aid oral maxillofacial surgeons' efforts to improve patient care.

457
Tourrette's Syndrome; Prevalance, Etiology, and Management Difficulties

John Fayyad MD (Lebanon)

Tourette's Syndrome (TS) and other types of Tic Disorders are quite prevalent, yet are under-recognized in child and adolescent populations, ranging from mild tics that require no intervention to complex presentations that pose challenges to clinical management. TS is frequently comorbid with Attention Deficit Hyperactivity Disorder (ADHD) and Obsessive Compulsive Disorder (OCD), which themselves often require treatment and may complicate the clinical presentation and management. Strategies for management of TS and comorbid conditions will be reviewed including recent developments in psychopharmacology.

Hall J Session 4
Free Papers

458
End Stage Renal Disease among Patients at Prince Ali Bin Al-Hussein Military Hospital

Amer Bderat MD, khalel S. alneimat, MD, Ameera AL-sarairah, RN, Rasha AL-farayah, Department of internal medicine, Royal Medical Services (Jordan)
bderatamer@yahoo.com

Objectives: The aim of this study is to determine demographic features, the causes, and the long-term outcome of all patients with end stage renal disease on regular hemodialysis at Prince Ali Hospital in the south of Jordan
Methods: A retrospective study involves all patients with end stage renal disease who are on regular hemodialysis at Prince Ali Hospital from Jan1995 to Dec 2012. The data collected was reviewed regarding gender, age at the initiation of dialysis, their primary disease which lead to chronic renal failure and other associated disease. The long-term outcome of all patients were reviewed.
Results: 91 patients were on regular dialysis at Prince Ali Hospital during the study period. Forty nine(54%) were male patients. The commonest cause of end stage renal disease was hypertinsive nephropathy seen in 49% of patients followed by diabetic nephropathy which occurred in 16% of patients. Glomerulonephritis account for 11% patients. Long-term follow
up showed 44% of patients are still on dialysis. Only 6% of patients had successful renal transplantation, while 50% of patients died while on hemodialysis.
Conclusion: The most common causes of end stage renal disease were hypertensive nephropathy and diabetic nepphropathy which are preventable causes if detected early and treated properly. Kidney transplantation program should be promoted because it is the best choice of renal replacement therapy in patients with end stage renal disease should be achieved.

459
The Importance of Platelet Indices for Predicting Myocardial Infarction

Quteiba Nuseir MD, Maysa'a Al-Shyyab Bcs, Mervat Abu-Mallouh Bcs, Amal Nwafleh Bcs, Amal Hatamleh Bcs, Lubna Al-Kofahi Bcs.*
Dept. of Internal Medicinet, Prince Rashid Hospital, Irbid, (Jordan)
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Objectives: To determine the diagnostic value of platelet indices for prediction of acute myocardial infarction.
Methods: A retrospective study included 78 patients of their age ranged between 27-78 years, who attended internal medicine department at Prince Rashed Ben Al-Hassan Military Hospital, North of Jordan, in the period between November 2009 and May 2010, Platelet indices included mean platelet volume, distribution width and platelet large cell ratio, obtained by Sysmex KX-21 automated cell counter. There are two study groups, Group I: 27 patients consistent with acute myocardial infarction based on chest pain persisting > 30 minutes, ST-segment elevation of >= 0.2 mV in >= 2 contiguous leads on a standard 12-lead ECG, and elevation of serum creatine kinase level. Group II; are 51-healthy subjects, who did not consistent with acute myocardial infarction.
Results: No statistical significant difference compared between the age of subjects with acute myocardial infarction (52.9 ± 10.7

years) and with healthy control subjects (53.6 ± 9.56), myocardial infarction was equally affected males and females. There was no statistical significant difference of platelet indices between males and females and the results obtained were not divided according to sex (P-value > 0.05). All platelet indices were significantly raised in patients with acute myocardial infarction compared with healthy control group.

Conclusion: Platelet indices are an important, simple and cost-effective tool that should be used more extensively to predict impending acute myocardial infarction.

460
Review of Spinal Meningioma Cases at King Hussein Medical Center

Rakan Al-Lozi MD, Amer AL-Shurbaji MD**, Nazmi Kamal MD****
** Neurosurgery Specialist at King Hussain Medical Center*
*** Neurosurgery Cosultant at KHMC*
**** Histopathology Consultant at KHMC (Jordan)*
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Objectives: A retrospective analysis study of our experience in the surgical management of spinal meningioma cases at the neurosurgery department at King Hussain Medical Centre emphasising on the timing of surgery , best surgical approach and optimal outcome for different age groups.

Methods: A review of 45 cases of spinal meningiomas managed surgically and followed in our department since 2003 up to date for a mean of 3 to 7 years. Inclusion criteria was for patients diagnosed to have spinal meningioma confirmed by histopathology and managed surgically in our department. The analysis included age, neurological status at presentation, diagnostic methods, timing of surgery, surgical approach, postoperative care and outcome.

Results: Most of the spinal meningioma cases who were managed surgically improved neurologically post operatively and on physiotherapy especially the ones with minimal and short standing deficits in contrast to the ones who presented late with profound neurological deficits and worst in patients who were unable to walk.

Conclusion: Early diagnosis and surgical intervention are mandatory for a good surgical outcome. MRI improved outcome by early detection, diagnosis and proper detailed planning of the surgery aiming for total resection. Calcification and En plaque patterns limit total resection.

461
Endoscopy Evolution and Revolution

Rami Alqroom MD, Nidal Khasawneh MD, Feras Haddad MD, Feras A. Shaaban MD
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Objective: Neuroendoscopy is a corner stone in minimal invasive surgery in the field of neurosurgery. and an alternative to shunts in different types of cranial pathologies. In this paper we present our experience with neuroendoscope at King Hussein Medical Centre.

Methods: During the last 8 years 218 cases were operated on using neuronendoscope, 174 cases of hydrocephalus and 41 cases of; arachnoid cyst (15 cases), tumour biopsies (17 cases), chronic subdural haematoma (5 cases), and craniopharyngioma (4 cases). Procedures and cases are described.

The 174 cases of hydrocephalus included the following aetiologies; 71 cases congenital aqueductal stenosis, 53 cases secondary to brain tumor,8 cases secondary to intraventricular bleeding, 19 cases with shunt failure (7 cases infection and 12 cases shunt obstruction), 23 cases of complicated hydrocephalus (9 loculated hydrocephalus, 11 septated hydrocephalus and 3 cases of isolated ventricle.).

Results: The mean age for the 174 cases of hydrocephalus was 2.5 years (7 days to 66 years). Procedures included 163 cases of third ventriculostomy, 7 cases of aqueductoplasty, and 4 cases of lamina terminalis fenestration.

Procedure was successful in 59 cases (83%) of congenital aqueductal stenosis, 42 cases (80%) of brain tumour, 3 cases (37.5%) secondary to intraventricular bleeding, and 16 cases (68.4%) with shunt failure.

For complicated hydrocephalus unification

of the ventricle and fenestration of loculation was achieved in all cases.
The four cases of craniopharyngioma were operated on as a recurrence and the cysts were aspirated, fenestrated and a reservoir inserted.
Tumour biopsies were diagnostic in 15 (88%) out of 17 cases.
Conclusion: The experience with neuronendoscope suggests a positive effect on reducing invasiveness of surgery and thus reducing complications rate, intensive care stay, hospitalisation, and operating time which indeed reflected on surgery outcome and patient's morbidity.

462
Patterns of Malignancies of Surgically Treated Lung Cancer at King Hussein Medical Center

Ala Qayet MD,Jamal Al-Ayeedi MD,Hani Alhadidi MD,Mohammad Tarshehi MD,Fawaz Khammash MD,Abd Allateef Oqla MD.
MD, JBGS, IMRCSa Thoracic surgery fellow Royal Jordanian Medical Services
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Objectives: lung cancer is the most common type of cancer in industrialized nations. Our objective is to show the patterns and types of surgically resected lung malignancies according to subtypes, age, sex, and distribution found here in KHMC.
Methods: this is a retrospective descriptive study, held in King Hussain Medical City, between Jan 2008 and Jun 2012. 81 patient's files from thoracic surgery department who underwent surgery for lung cancer reviewed.
Results: there were 81 patients, 9 females (12%) and 72 males (88%). 20 patients had pneumonectomy (24.7%) and 61 patients had lobectomy (75.3%). Histopathologically, 31 patients (38.2%) were found to have sqaumous cell carcinoma, 29 patients (35.8%)with adenocarcinoma and 21 patients (25.9%) with other types; of these metastasis were in 6 patients(7.4%) and 5 with carcinoid (6.1%).
Conclusions: in our analysis of surgically resectable lung tumors we found that squamous cell carcinoma is more dominant with 38.2%, and adenocarcinoma is only second followed by metastasis and carcinod.

463
Reconstruction of Nasal Skin defects Following Excision of Basal Cell carcinoma

Mohammed AL-Bdour, MD,JBS, Maher AL-Khateeb, MD JBS, Rasha Ali AL-Jboor RN, Fatima Khalaf AL-Badareen RN, Fatemah Abdalhameed Al-Maaitah RN*
** Plastic Surgery Specialist, Royal Rehabilitation Center (Jordan)*
mbdooor@yahoo.com

Objectives: To present our experience in reconstruction of nasal defects following excision of nasal basal cell carcinoma.
Methods Retrospective analysis of 36 patients who underwent surgical excision with reconstruction of nasal BCC over the period from March 2009 to December 2010 was performed. Our reconstructive options included: primary closure in 3 patients, full thickness skin grafts harvested from pre-auricular area in 13 patients, local and loco regional flaps in 20 patients. Local and loco regional flaps included: forehead flap in 3 patients, nasolabial flap in 6 patients, glabellar flap in 4 patients, V-Y advancement flap in 2 patients, bilobed flap in 3 patients and dorsal nasal flap in 2 patients.
Results: Nasal BCC in our study was more common in males 58.3 %(21 patients) compared to females 41.7 %(15 patients). All the 36 patients were diagnosed clinically without the need for biobsy procedures before proceeding to surgical exciosion and reconstruction. The most common presentation was asymptomatic lesion 55.5% (20 patients), other presentations includes itching, local ulceration and bleeding. The most common nasal subunit affected by BCC was the ala 36.1%, followed by tip25%, sidewalls 22.3%, and dorsum 16.6%. The most common histopathological type of nasal BCC was the nodular BCC 55.5% followed by the sclerosing 22.2%, superficial 8.4%, basosquamous 8.4% and pigmented 5.5%. of the 36 patients, 34 (94.4%) had complete excision.

Conclusion: The diagnosis of Nasal BCC in expert hands is a clinical diagnosis, Surgical excision in theatre under loup magnification and good light source with immediate well planned reconstruction performed in selected patients is one of the best option for management of nasal BCC. Both local, loco regional flaps and full thickness skin grafts provide excellent aesthetic subunit restoration of nose depending on each individual case circumstances.

464
Perforation of Meckel's Diverticulum by Wood Splinter (Preoperatively Presented as Acute Appendicitis): Case Report with Review of Literature

Haitham S. Rbiehat MD JBS, Hala Adnan Alsokhni MD Hematopathologist, Odai Musa Sayegh MD JBS
** Royal Medical Services, KHMC (Jordan)*
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Objectives: We report this rare case so as to remind our physicians of this anomaly when evaluating acute abdomen.
Abstract: Meckel's diverticulum as we know is a rare congenital anomaly
of the gastrointestinal tract, occurring in about 2% of population.
Most of the time it is asymptomatic but found accidentally during laparotomy for other pathologies.
It could contain ectopic tissue like gastric or pancreatic tissue.
Meckel's diverticulum has its own complication such as bleeding, intestinal obstruction, inflammation, intussusceptions and neoplasm.
It may be complicated by perforation by foreign bodies which is rare as in our case here and after review of its incidence in the literature it was 0.5% of symptomatic diverticulae.
In our case, the patient presented with symptoms of acute appendicitis, proved at opearation as Meckel's diverticulum perforated by a wood splinter that had been swallowed accidentally.

465
Isolated Form of Sarcoidosis in the Spleen

Sahel Hammouri MD, Dr. Mohammad Ajlouni Dr. Mohmmad shorman,*
** Consultant General Surgeon, Royal Medical Services (Jordan)*
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Objectives: Sarcoidosis is a rare chronic, multisystem granulomatous disorder while isolated splenic sarcoidosis cases are very rare We report such a case and we review the literature pertaining to primary sarcoidosis of the spleen
Methods: A 48 year old female patient presented with left upper abdominal pain and B symptoms of two months duration. She was found to have left hypochonreal tenderness and splenomegaly. Abdominal Ultrasound: showed multiple solid masses of the spleen. Abdominal laparoscopy: revealed large spleen with multiple solid nodules Histopathology: Splenic Sarcoidosis. Chest and Abdominal CT scan were negative. Full CBC count and bone marrow biopsy were normal. Liver and kidney function test were normal splenectomy was done. The patient underwent uneventful recovery and discharged home.
Results: Sarcoidosis is a chronic, multisystem granulomatous disorder, it is rare forming (1 per 100000) furthermore, isolated splenic sarcoidosis cases are very rare, it is characterized by an accumulation of T lymphocytes and mononuclear phagocytes, noncaseating epithelioid granulomas, and derangements of the normal tissue architecture and it has unknown etiology most patients progress to remission spontaneously.inaddition to that, corticosteroid therapy can be consedered in sarcoidosis treatment and splenectomy usually reserved as last resort for patient with massive splenomegalybut does not alter disease progression.
Conclusion: isolated splenic sarcoidosis cases are very rare form of sarcoidosis,most patients progress to remission spontaneously. however, corticosteroid and splenectomy has in important place in their treatment.

SYMPOSIA

S01
World Federation of Hemophilia Symposium

Guests:
Assad Haffar MD (Canada)
Bernadette Garvey MD (Canada)
Flora Peyvandi MD (Italy)
Rezan Abdul- Kadir MD (UK)
Samir Faouri MD (Jordan)

Moderators:
Moustafa Al-Falah MD
Mufeed Al-Hammouri MD
Hala Rimawi MD
Mousa Barqawi MD
Basem Kiswani MD
Rami Al-Majali MD

Date: Tuesday 20/11/2012
Time: 09:00 - 13:30
Hall: Hall D
Venue: KHBTCC

09:00 - 09:30 68	Thrombophilia: the Promotion of Blood Clotting Bernadette Garvey MD (Canada)
09:30 - 10:00 69	Rare Bleeding Disorders Flora Peyvandi MD (Italy)
10:00 - 10:30 70	Menorrhagia and Bleeding Disorders: Management Options Rezan Abdul- Kadir MD (UK)
10:30 - 11:00 71	Home Treatment In Haemophilia Assad Haffar MD (Canada)
11:00 - 11:30	Coffee Break
11:30 - 12:00 72	ITP: Unclear Terminology, Uncertain Etiology, Arguable Management Bernadette Garvey MD (Canada)
12:00 - 12:30 73	Thrombotic Thrombocytopenic Purpura (TTP) Treatment Flora Peyvandi MD (Italy)
12:30 - 13:00 74	Women with Inherited Bleeding Disorders - Reproductive Choices Rezan Abdul- Kadir MD (UK)
13:00 - 13:30 75	A Proposed Model of Prophylaxis in Patients with Haemophilia Type A in Jordan Samir Faouri MD (Jordan)

S02
Clinical Practice Guidelines
(Royal College of Physicians)

Guests:
Elizabeth Avital (UK)
Rhona Buckingham (UK)

Moderators:
Ali Jawad MD (UK)
Ala' Al-Heresh MD
Atallah Al-Issa MD

Date: Wednesday 21/11/2012
Time: 11:30 - 13:30
Hall: Hall F
Venue: KHBTCC

To Illustrate Health Care Quality Improvement using the Topic of Chronic
Obstructive Pulmonary Disease (COPD) and the RCP Quality Spiral

Aim

To illustrate health care quality improvement using the topic of Chronic Obstructive Pulmonary Disease (COPD) and the RCP quality spiral

Objectives
Health care quality improvement will be illustrated through two presentations focusing on COPD:
Setting standards for care - the COPD NICE guideline (developed by the NCGC which is hosted by the RCP) - an overview.
Measurement of health care and using data for improvement.

Following these presentations a facilitated discussion will be held with the Jordanian colleagues to achieve the following objectives:
Identify how the presentations relate to the Jordanian context e.g. identifying similarities and highlighting differences.
Focus thinking to identify the areas of patient care that need to improve, state of readiness for change, what their aspirations are and how the RCP can provide support in achieving this.

S03
New Insights on Biologic Monotherapy
(Sponsored by Roche)

Guests:
Rieke Alten PhD (Germany)
Moderators:
Alaa Al Heresh MD
Adel Wahadneh MD
Date: Tuesday 20/11/2012
Time: 12:40 - 13:40
Hall: Hall E
Venue: KHBTCC

S04
Visionary MR Imaging Techniques
(Sponsored by GE Healthcare)

GE Healthcare

Guests:
Paul Jamous (Lebanon)
Moderators:
Adballah Jameel MD
Asem Hiari MD
Date: Tuesday 20/11/2012
Time: 13:30 - 14:30
Hall: Hall F
Venue: KHBTCC

GE Healthcare puts forward visionary MR imaging techniques, performing and easy-to-use that can help clinicians gain insight into a patient's condition with the potential for reducing biopsy, sedation or contrast injection.

Whether it's assessing a whole liver parenchyma non-invasively, capturing arterial and venous flow in fine detail without contrast or correcting for patient motion to reduce the need for sedation, our new suite of MR visionary applications focuses on the way MR should be – obtaining easily great clinical results through non-invasive exams.

S05
University of South Florida Health Center for Advanced Medical Learning and Simulation (CAMLS)
(Sponsored by CAMLS LSI)

Guests:
Dr Judy Genshaft (USA)
Dr Stephen Klasko (USA)
Dr Deborah Sutherland (USA)
Moderators:
Chip Diehl (USA)
Aous Qutaishat (USA)
Amer Amireh MD
Date: Tuesday 20/11/2012
Time: 13:30 - 14:30
Hall: Hall G
Repeated on:
Date: Wednesday 21/11/2012
Time: 13:30 - 14:30
Hall: Hall F
Venue: KHBTCC

The Future of Healthcare Training is here - USF's CAMLS is transforming the quality of healthcare through cutting-edge technology, innovation and simulation. Under one roof, Doctors, Nurses, Pharmacists and other healthcare professionals from around the world are being tested for cognitive, behavioral and technical competence as individuals and teams. CAMLS integrates innovative simulation experience with education and research excellence. Often Doctors rarely are objectively evaluated for their technical skills and teamwork competence since their medical school training. Interprofessional team training is major focus and vital component for patient safety. Simulation technology allows doctors, nurses, anesthesiologists, therapists and other healthcare providers to hone their skills in a risk-free environment. CAMLS is a real-life lab for training using the latest in technology all toward im proving healthcare to the patient. Military Medics treat simulated trauma patients in a real world simulator before deploying to the operational theater. Quality of Healthcare is enhanced; Standards raised; New Frontiers of technology and simulation are opened.

CAMLS and its medical learning and simulation model is ideal for international partners - from initial certification of healthcare professionals to practice medicine; to reoccurring objective medical training to a laboratory for innovation, learning and medical symposiums, CAMLS can transform and enhance the standards of healthcare available to their patients.

S06
Global Development of Biosimilar Products
(Sponsored by HIKMA Pharmaceuticals)

Guests:
Stanley (Seung Suh) Hong PhD (Korea)
President, R&D CELLTRION, Inc
Moderators:
Ahmad Telfah MD
Raid Marji MD
Date: Tuesday 20/11/2012
Time: 12:00 - 13:00
Hall: Hall K
Venue: KHBTCC

This presentation will give a brief profile of Celltrion, including biosimilar's facility and product pipeline including eight candidates in immunology and oncology areas. Additionally, the speaker will talk about the biosimilar's future global regulatory strategy and will introduce global MAA (BLA) submission plan which applies to 149 countries in North America, Europe, Russia, CIS, Asia, MENA, Africa, and Latin America regions. Lastly, quality comparability and nonclinical testing results of CT-P13, CT-P06 and CT-P10 will be introduced to support physicochemical, functional and nonclinical comparabilities of Celltrion's mAb biosimilars to the reference products.

Celltrion is a biopharmaceutical company which has more than 10 years of experiences specializing in monoclonal antibodies (mAb). Celltrion's facility is certified by U.S. FDA cGMP, and is the largest mAb production facility in Asia. Celltrion's certified facility and high technology are qualified for developing complex mAb biosimilars.

This year EMA has published the regulatory guidelines for biosimilars of complex biologics and the US FDA as well posted the first draft of biosimilar guideline. Following the official EMA and other countries' guideline establishment including US FDA's, many biopharmaceutical companies including Asian companies have ramped up their efforts to gain entrance into this regulatory approval pathway, especially for mAb biosimilars. Celltrion successfully developed mAb biosimilars in terms of structural as well as functional comparability so far. Celltrion consults with EMA to plan and conduct global clinical trials as a step-wise approach and the global clinical phase III trials of two mAb biosimilars were successfully completed by following strict EMA guideline. Recently, the Korea FDA approved CT-P13 (Celltrion's infliximab biosimilar) which is the world-first mAb biosimilar. Celltrion is now awaiting a series of approvals world-widely, including EMA.

S07
Implementation of the Agility 160 leaf MLC - Initial Experience of its Clinical Advantage

(Sponsored by Al Faisaliah Healthcare Systems Co.)

FHS
Al Faisaliah Healthcare Systems

Guests:
Chris Walker MD (UK)
Moderators:
Sameer Khraisat MD
Belal Hiari MD
Date: Tuesday 20/11/2012
Time: 17:00 - 18:30
Hall: Hall K
Repeated on:
Date: Wednesday 21/11/2012
Time: 11:30 - 13:30
Hall: Hall K
Venue: KHBTCC

The James Cook University Hospital, Middlesbrough procured four new matched Elekta Agility linacs in 2010 with the intention that three would be installed in a newly constructed department in June 2011 and the fourth would replace an aging machine in the existing department in late 2012. A partnership was entered into with

Elekta to facilitate the earliest possible clinical introduction of the Agility machines by April 2012 as the Agility project was still evolving.

Following fifteen months of close collaborative work three new matched Elekta Agility linacs have been successfully introduced into clinical use. This success has only been possible through careful coordination and integration of the Agility linac project into both record and verify and treatment planning system developments.

The new Agility 160 leaf MLC required beam matching to be achieved between the three linacs and subsequently this was translated into a single beam model within each of the Elekta Monaco and Oncentra MasterPlan treatment planning systems.

The Agility MLC provides advantages in terms of interdigitation, speed and resolution through in a number of clinical settings ranging from three dimensional (3d) conformal treatments to volumetric modulated arc therapy (VMAT).

Agility offers a clear advantage in terms of clinical dose distributions and demonstrates an increased efficiency in treatment delivery and a consequent improvement in departmental productivity.

S08
New Trends & Advanced Applications in CT

(Sponsored by GE Healthcare)

GE Healthcare

Guests:
Melhem Younan BSc (UAE)
CT Advanced Apps Manager
Moderators:
Abdallah Al-Omari MD
Imad Athamneh MD
Date: Wednesday 21/11/2012
Time: 13:30 - 14:30
Hall: Hall G
Venue: KHBTCC

Radiation dose is becoming a big debate in the Radiology world, weighting benefits against disadvantages; we will highlight the new advances in low dose scanning, especially GE Healthcare approach and its new technique,

As well as, the newest technology in cardiac CT acquisition, motion correction related and spectral imaging / Dual Energy.

S09
Subarachnoid Hemorrhage Management

(Sponsored by Al-Waed Medical Company, MicroVention TERUMO USA)

AMC AL-WAED MEDICAL COMPANY
MicroVention TERUMO

Guests:
Gyula Gal MD (Sweden)
Hazem Habboub MD (Jordan)
Moderators:
Amer Al-Shurbaji MD
Moneer Deheyat MD
Date: Wednesday 21/11/2012

Time: 14:30 - 15:30
Hall: Hall H
Venue: KHBTCC

14:30 - 15:00	Total management of SAH Gyula Gal MD (Sweden)
15:00 - 15:30	Flow Diverter Experience above Internal Carotid Bifurcation Hazem Habboub MD (Jordan)

S10
Cerebrovascular Diseases

(Sponsored by Al-Waed Medical Company, BALT EXTRUSION France)

Guests:
Gyula Gal MD (Sweden)
Sultan Al-Qahtani MD (Saudi Arabia)
Moderators:
Hazem Habboub MD
Majed Habahbeh MD
Date: Wednesday 21/11/2012
Time: 15:30 - 16:30
Hall: Hall H
Venue: KHBTCC

15:30 - 16:00	Endovascular management of cerebral AVMs and DAVFs Gyula Gal MD (Sweden)
16:00 - 16:30	The role of intracranial angioplasty and stenting for ischemic stroke Sultan Al-Qahtani MD (Saudi Arabia)

WORKSHOPS

W01
Faculty Development Day
Royal College of Surgeons of England (UK)

The Royal College of Surgeons of England

Guests:
John Weston-Underwood (UK)
Louise Goldring (UK)
Liaison Officer:
Ahmad Uraiqat MD

Date: Thursday 15/11/2012
Time: 08:45 - 17:00
Hall: Biomedical Engineering Institute (BEI)
Venue: King Hussein Medical Center

Faculty Development Day aims to build on participant's knowledge of teaching and learning to improve their current practice. This is an interactive course with practical examples throughout. It is unique as it is taught by both a highly skilled surgeon alongside an educator and each course is tailored to meet the needs of the participant.

W02
Basic Surgical Skills Course (BSS)
Royal College of Surgeons of England (UK)

The Royal College of Surgeons of England

Guests:
John Weston-Underwood (UK)
Louise Goldring (UK)

Liaison Officer:
Ahmad Uraiqat MD

Date: Friday - Saturday 16-17/11/2012
Time: 08:15 - 17:30
Hall: Biomedical Engineering Institute (BEI)
Venue: King Hussein Medical Center

This Basic Surgical Skill two day course has been designed to introduce surgical trainees to safe surgical practice within a controlled workshop environment and it aims to 'teach, assess and certify' the ability of trainees to use safe and sound surgical techniques that are common to all forms of surgery. Basic Surgical Skills (BSS) course is strongly recommended for all surgical trainees who take up their first surgical appointment and is open to foundation doctors intending a surgical career or surgically related career.
The course has been agreed on an intercollegiate basis and trainees who complete the course will be issued with certification that will be reciprocally recognized by all four Royal Surgical Colleges.
It will be delivered at the King Hussein Medical Center by the trainers from both the Royal College of Surgeons of England and Royal Medical Services.

W03
Challenging Cases in Colorectal Surgery

Guests:
Sarah O'Dwyer MD (UK)

Moderators:
Hanan Rihani MD
Amer Amireh MD

Date: Monday 19/11/2012
Time: 09:00 - 12:00
Hall: Hall H
Venue: KHBTCC

An international expert in colorectal diseases will share her opinion in managing difficult cases in colorectal cancer and other colorectal diseases. Different challenging case will be presented and open discussion will be conducted focusing on diagnosis, preoperative optimization and treatment.

W04
Neurosurgical Approach
(Live Surgery with Video Transmission)

Guests:
Luis Borba MD (Brazil)

Liaison Officer:
Abdullah Akayleh MD

Date: Saturday - Sunday 17-18/11/2012
Time: 08:00 - 16:00
Hall: Physiology Hall
Venue: King Hussein Medical Center

Certain brain tumors involving the skull base are challenging cases like: jugulars tumor, middle fossa brain lesions, acoustic tumor, petrous apex, anterior clinoid meningioma surgery and other cerebellopontine angle tumors.
The work shop will be in cases need transpetrosal, jugulars tumor and anterior clinoid meningioma approaches.

W05
Plastic Surgery
High Definition VASER Liposuction

Guests:
Cemal Senyuva MD (Turkey)

Liaison Officer:
Waleed Haddadin MD

Date: Sunday 18/11/2012
Time: 10:00 - 13:00
Hall: Prince Hamzah Auditorium (PHA)
Venue: King Hussein Medical Center

Third generation solid probe ultrasonic liposuction technique is known as VASER (Vibration Amplification of Sound Energy at Resonance).
VASER allows surgeon to work on superficial fat layers besides deep and intermediate layers. To highlight the 3-dimensional muscular anatomy and contouring of soft tissue, ultrasonic emulsification and aspiration is performed after deep and superficial infiltration. The surgical plan is carefully designed in each particular case to mark pectoral, rectus abdominus, serratus, external abdominal muscle borders.
VASER emulsification was applied in continues mode for deep and intermediate layers. Debulking was performed using Ventx cannulas starting from deep layer and continuing in the intermediate layer and between muscles in order to accentuate negative spaces. Superficial emulsification in VASER mode and aspiration was performed for definition.
Positive spaces can be pronounced by adding fat grafts to rectus muscles and pectoral muscles. Although VASER-assisted high-definition liposuction technique is appropriate for surgeons whom experienced with ultrasonic technologies in liposuction, it gives the ability to sculpt body in more artistic way.
This workshop is a 3 hour Presentation and Video on this technique.

W06
Pediatric Surgery
Urinary Bladder and Lower Urinary Tract Reconstructive Surgery
(Live Surgery with Video Transmission)

Guests:
John Park MD (USA)

Liaison Officer:
Ibrahem Daradkeh MD

Date:
Sunday 18/11/2012 (07:00 - 16:00)
Monday 19/11/2012 (07:00 - 14:00)
Hall: Queen Rania Pediatric Hospital Auditorium (QRPHA)
Venue: King Hussein Medical Center

The first day includes live surgery for cases with neurogenic urinary bladder associated with or without meningocele, performing urinary bladder augmentation using intestine combined with Monti -procedure in the left colon for stool incontinence.
The second day includes reconstructive surgeries for neck of the urinary bladder and hypospadias repair utilizing buccal mucosa.

W07
Urology
Management of Kidney and Ureteric Stone in Using Laser

(Sponsored by Jordan Medicare Corp)
(Live Surgery)

Guests:
Thomas Knoll MD (Germany)

Liaison Officer:
Firas Hammouri MD

Date: Sunday 22/11/2012
Time: 08:00 - 16:00
Hall: Prince Hussein Center for Urology and Organ Transplant (PHCUOT)
Venue: King Hussein Medical Center

Procedure indications :

- For Flexible URS it would be highly recommended to Kidney Stones with max size of 15mm.
- For rigid URS all stones should OK.

Prof. Thomas Knoll is a worldwide known urologist with boundless experience and knowledge in the Flexible URS and Laser technique. He practices at the Urologische Klinik am Klinikum Sindelfingen-Boblingen, Germany. Prof. Knoll will perform live flexible retrograde intrarenal surgeries using the flexible Uretero-Renoscopy along with the holmium laser which is the safest and most used to fragment the stones in the Ureter and kidneys. Tips and tricks, handling and novelties of the Flexible Uretero-Renoscopy and holmium laser will also be discussed by Prof. Knoll during the live surgeries.

W08
Orthopedic Surgery
ACL Repair in High-Level Athletes: Predictive Factors of Come Back

(Sponsored by Al-Wafi Drug Store)

Guests:
Alfred Khoury MD (Lebanon)

Moderators:
Issam Dahabra MD

Liaison Officer:
Ayman Mustafa MD

Date: Monday 19/11/2012
Time: 10:00 - 11:00
Hall: Hall G
Venue: KHBTCC

Knee injuries in high level-athletes present a real challenge for the treating sport medicine physician. It involves establishing a fast and accurate diagnosis to return the athlete safely to a preinjury level of activity. Next, the physician should be aware of the high rate of re-injury in this exposed population. Finally, rehabilitation after surgery demands close follow-up and communication between the surgeon and the medical team and coaches.

The debate continues regarding surgical versus conservative treatment of specific knee injuries in a normal population, but when it comes to high demand athletes, the attitude is more aggressive and straightforward; ig: the time is against us, and decision should be taken within 24 hours of the injury.

Anterior cruciate ligament injuries of the knee are the most frequent cause of long-term disability of the knee. Although, surgical techniques have improved, this injury represents the nightmare of any professional player. This is due to the long period of inactivity in the short career of these top-level athletes. Unrecognized combined injuries are devastating in

athletes (although uncommon), but careful management can achieve a good result in this young population.
This presentation will try to outline some of the more common conceptual problem areas-a brief outline of the surgical perspectives as it applies to professional football player. We were also concerned by the early signs of osteoarthritis of the knee in this young population.

W09
Orthopedic Surgery
TSF (Tylor Spatial Frame) for Deformity Correction
(Sponsored by Petra Drug Store)

Guests:
Ahmad Bo-Eisa MD (Saudi Arabia)

Moderators:
Mahmoud Odat MD

Liaison Officer:
Ayman Mustafa MD

Date: Monday 19/11/2012
Time: 11:30 - 13:30
Hall: Hall G
Venue: KHBTCC

The Taylor Spatial Frame, a unique external fixation system, can treat a variety of fractures, nonunions, andmalunions. In conjunction with a software program, the Spatial Frame can correct the simplest to the most complex skeletal deformity utilizing the same frame. Different methods of correction may be utilized.

1- Acute fractures may be stabilized with the Spatial Frame using traditional methods of traction and arched olive wires for direct reduction.
2- Alternatively, fracture fragments can be attached to Spatial rings with interconnecting FastFxTM struts.
After fragment fixation the fragments are reduced manually and the FastFx struts are locked in position.
3- Malunions and congenital deformities may be treated by adjusting a frame to exactly mimic a deformity prior to mounting. As the frame is returned to its neutral position the deformity is corrected.
4- Rings may be attached to each fragment prior to conventional strut attachments (or utilizing FastFxstruts in the unlocked position) for fractures or chronic deformities. As the struts are brought back to their neutral position the fracture or malunion will be reduced.

After any of these four primary methods fragments may be further reduced by one of the two secondarymethods, either the original Residual Deformity Correction or the more recently developed Total Residual deformity Correction.

This is a 2 hour exclusive detailed workshop that is devided into 2 parts. Part 1 is the theoretical aspect including the principles, biomechanics and how to do deformity analysis. Part 2 is a hand on demonstration workshop that is focusing on frame build and deformity correction of long bones.
Total time for both parts is 2 hours.

W10
ENT
Head & Neck Surgery Workshop
(Live Surgery with Video Transmission)

Guest:
K. Thomas Robbins MD (USA)

Liaison Officer:
Shawkat Al-Tamimi MD

Date: Saturday - Sunday 17-18/11/2012
Time: 08:00 - 16:00
Hall: King Hussein Hospital Library (KHHL)
Venue: King Hussein Medical Center

Professor Thomas Robins from USA with highly skillful experience in Head & Neck surgery will conduct this workshop and will Perform the following surgical

procedures: Laser Cordectomy, Facial nerve Grafting, Release Laryngeal Fibrosis Post Radiotherapy, and Partial Laryngectomy & Neck Dissection.

W11
ENT
Rhinology FESS
(Live Surgery with Video Transmission)

Guest:
David Parsons MD (USA)

Liaison Officer:
Deifallah Al-Raqad MD

Date: Monday 19/11/2012
Time: 08:00 - 14:00
Hall: King Hussein Hospital Library (KHHL)
Venue: King Hussein Medical Center

Professor David Parson from North Carolina USA will conduct a workshop on Rhinology and Endoscopic Sinus Surgery. The following surgical cases are planned for the workshop:
57 yrs old male patient, medically free, has a history of recurrent Sino-nasal Inverted Papilloma invading the Rt. Nasal cavity and all paranasal sinuses with expansion of the Lt. Frontal sinus.
42 yrs old male patient, has a history of recurrent extensive nasal polyposis causing external widening of the nasal dorsum.
38 yrs old male patient, scheduled for FESS for sphenoidal sinusitis.
Basic FESS for 38 yrs old female patient with chronic sinusitis and nasal polyposis.

W12
ENT
Difficult Pediatric Airways
(Live Surgery with Video Transmission)

Guest:
David Parsons MD (USA)

Liaison Officer:
Eiad Al-Safadi MD

Date: Thursday 22/11/2012
Time: 08:00 - 17:00
Hall: Queen Rania Pediatric Hospital Auditorium (QRPHA)
Venue: King Hussein Medical Center

The cases that will be presented and be operated will be:
1- A 24 months old female child with recurrent large thick anterior laryngeal web involving >80% of the glottis and subglottis (breathing by tracheostomy and being operated 3 times for the web).
2- A 3 years old male child with large thick anterior laryngeal web involving >75% of the glottis(not operated yet).
3- A 5 years old male child with recurrent respiratory papillomatosis involving the nasal cavity,naso and oropharynx,supraglottis,glottis and esophagus (being operated >30 times).
4- A 9 years old boy who sustained a severe form of caustic pharyngeal & global esophageal burn injury caused by unintentional ingestion of large amount of alkali on April 2005, complicated by global 1st to 3rd degree oropharyngeal, global esophageal & gastric burn, multiple esophageal deep ulcers, strictures & irregularitie. Tracheostomy and local myofascial flap pharyngeoplasty done and after failure Redo pharyngeoplasty and gastric pull up done, this child is dependent on the tracheostomy for breathing and needs reassessment of the laryngeal and the pharyngeal function.

W13
ENT
Otology and Base of Skull Surgery
(Sponsored by Jordan Hearing Aids)
(Live Surgery)

الأردنية للسماعات الطبية
Jordan Hearing Aids | Since 1992

Guest:
Michael McGee MD (USA)

Liaison Officer:
Mefleh Al-Sarahan MD

Date: Thursday - Friday 22-23/11/2012
Time: 08:00 - 16:00
Hall: King Hussein Hospital Operating Room - ENT (KHHOR)
Venue: King Hussein Medical Center

Two days live surgery on selected cases of Base Skull Problems

W14
Obstetrics & Gynecology
Laparoscopic Surgery Workshop
(Live Surgery)

Guest:
Mustapha Chaaban MD (Lebanon)

Liaison Officer:
Amer Gharaybeh MD

Date: Sunday 18/11/2012
Time: 08:00 - 16:00
Hall: Gynecology Operating Room
Venue: King Hussein Medical Center

Live surgery session on real patients. Cases include: Ovarian cysts, endometriosis, myomectomy, Lap. Hysterectomy and others. There will be a chance for candidates to assist in these cases.

W15
Obstetrics & Gynecology
Fetal Ultrasound Workshop
(Live Cases)

Guest:
Zarko Alfirevic MD (UK)

Liaison Officer:
Maher Maaytah MD

Date: Monday 19/11/2012
Time: 08:00 - 14:00
Hall: Fetal Medicine Unit
Venue: King Hussein Medical Center

Live scanning for congenital abnormality and demonstrating normal scans in the first, second and third trimester. There will be a chance for some hands on scanning during the workshop.

W16
Interventional Radiology & Vascular Surgery
Peripheral Vascular Malformations: Endovascular Concepts
(Sponsored by EV3 / COVIDIEN)
(Live Cases)

Guest:
Khalid Al-Naqabi MD (UAE)

Moderators:
Hazem Habboub MD
Sizeph Haddad MD
Maher Al-Khawaldeh MD

Date: Tuesday 13/11/2012
Time: 09:00 - 17:00
Hall: Catheterization Laboratory
Venue: King Hussein Medical Center

Case based review for variable peripheral vascular malformations: high flow and slow flow vascular malformations and lymphatic malformations. There will be discussions of the different strategies of treatment according to type and locations with different embolic materials including Glue, coils, onyx and Squidd.

W17
Interventional Radiology & Vascular Surgery
Critical Limb Ischemia: New Frontiers
(Sponsored by EV3 / COVIDIEN)
(Live Cases)

Guest:
Hani Al-Fadel MD (Bahrain)

Moderators:
Fayek Haddadin MD
Izzedin Qtaish MD
Mamoun Al-Bashir
Sizeph Haddad MD

Date: Wednesday 14/11/2012
Time: 09:00 - 17:00
Hall: Catheterization Laboratory
Venue: King Hussein Medical Center

Case based review and discussion for different categories of critical limb ischemia. New methods of treatment including atherectomy, drug eluting balloons and stents, Bioabsorbable stents. Different strategies for total occlusion recanalization will also be discussed

W18
Interventional Radiology & Neurology Petra - Jordan Live Course in Interventional Neuoradiology

(Sponsored by Microvention - Terumo, Covidien, Balt EXTRUSION)
(Live Cases)

Guest:
Gyula Gal MD (Sweden)
Sultan Qahtani MD (Saudi Arabia)

Moderators:
Hazem Habboub MD
Sizeph Haddad MD
Maher Al-Khawaldeh MD

Date: Thursday 15/11/2012
Time: 09:00 - 17:00
Hall: Catheterization Laboratory
Venue: King Hussein Medical Center

Hands on training for different tools used in interventional neuroradiology, from handling of different flow guided and infusion micro catheters to preparation of different remodeling balloons and flow diverters. Cases include Cerebral AVMs, Partially treated AVM, Intracerebral aneurysms: Flow diverters, Y stenting, Dural malformations.

W19
Interventional Radiology & Vascular Surgery
Thoracic and Abdominal Aortic Aneurysm Endovascular Repair with Difficult Fixation Zone

(Sponsored by Medtronic)
(Live Cases)

Guest:
Murat Aksat MD (Turkey)

Moderators:
Fayek Haddadin MD
Hazem Habboub MD
Mamoun Al-Bashir MD

Date: Sunday 18/11/2012
Time: 09:00 - 17:00
Hall: Catheterization Laboratory
Venue: King Hussein Medical Center

Endovascular repair of patients with thoracic and abdominal aortic aneurysms with challenging proximal fixation zones. Different modalities of dealing with this problem will discussed including use of Chimney procedure and debranching.

W20
Interventional Radiology & Vascular Surgery
Basic Concepts in Neural Catheterization: MicroVention TERUMO Simulator Hand on training

(Sponsored by Al-Waed Medical Company, MicroVention
TERUMO USA)

Guest:
Jean-Claude Lechien MD (France)
Barbara Pichon MD (France)
Hazem Habboub MD (Jordan)

Moderators:
Izzedin Qtaish MD
Maher Al Khawaldeh MD

Date: Tuesday - Wednesday 20-21/11/2012
Time: 09:00 - 18:00
Hall: Umm Qais Hall
Venue: KHBTCC

New concepts in aneurysm treatment – Hands-on on scepter remodeling balloon and Junior intracranial stents, endovascular treatment to illustrate various methods for intracranial catheterization and use of new generations of coils and stents.

W21
Anesthesia
Anaesthetic Crisis Simulation, One Lung Simulation Course

Guest:
Omar Al-Rawi MD (UK)

Liaison Officer:
Muath Kreishan MD

Date: Sunday 18/11/2012
Time: 08:00 - 16:00
Hall: King Hussein Hospital Operating Room (KHHOR)
Venue: King Hussein Medical Center

The workshop includes One Lung simulation course which goes through common problems encountered during one lung anaesthesia and some rare but challenging emergencies like emergency anaesthesia for Bronchopleural fistula.It includes also, Anaesthetic Crisis Simulation which includes can't intubate can't ventilate, Anaphylaxis, Malignant Hyperthermia scenarios. There will be a practice on insertion of double lumen tubes and bronchial blockers on intubation head / torso mannequins by the help of incubating bronchoscopes.

W22
Anesthesia
Ultrasound Guided Nerve Blocks
(Live Cases)

Guest:
Steven Clendenen MD (USA)

Liaison Officer:
Jamal Izzat MD

Date: Thursday 22/11/2012
Time: 08:00 - 16:00
Hall: King Hussein Hospital Operating Room (KHHOR)
Venue: King Hussein Medical Center

The workshop will include hands on practice on ultrasound-guided insertion of needles for regional anesthetic administration of several kinds of blocks, mainly brachial plexus blocks.
Utilizing ultrasound for nerve blocks enhance efficacy and safety, also it is increasingly used worldwide,however,learning and experience are needed for better successes.

W23
Ophthalmology
Medically Unexplained Presentation
(Neuro-Ophthalmology & Neurology)

Guest:
Gordon Plant MD (UK)

Moderators:
Majed Habahbeh MD
Suha Al-Eajailat MD
Mosa Almadani MD

Date: Sunday 18/11/2012
Time: 09:00 - 14:00
Hall: Queen Rania Pediatric Hospital Library (QRPHL)
Venue: King Hussein Medical Center

The aim of this workshop is to discuss some of the difficult cases that we have faced in the Neur-Ophthalmology clinic, whether from the neurological or ophthalmological aspect.
During the work shop, each case will be presented thoroughly (history, examination, investigations, differential diagnosis, how

we had managed each case, and finally how is our patient doing).
After each case there will be open discussion with our guest speaker, and the audience.

W24
Ophthalmology
The Art of Visiual Rehabilitation / Complex Phaco, Keratoprosthesis

Guest:
Christopher Liu MD (UK)

Liaison Officer:
Nancy Al-Raqad MD

Date: Monday 19/11/2012
Time: 09:00 - 14:00
Hall: Ophthalmology Department (Ophth Dep)
Venue: King Hussein Medical Center

The ophthalmology workshop will include the following

1. Examining complex anterior segment cases including: severe end stage corneal disease, severe cicatrizing eye disease, patients with corneal blindness not amenable for conventional keratoplasty.
2. Examining candidates for keratoprosthesis and surgical planning for these patients.
3. Demonstration of novel techniques in phacoemulsification.
4. Short seminar about planning for cataract surgery.
5. Live cataract surgery at ophthalmology department demonstrating phaco techniques including patients with traumatic cataract and aniridia, cataract with soft nucleus, the use of capsule tension rings for patients with weak zonules.

W25
Emergency Medicine
The Charite Emergency Medicine Workshop

Guest:
Martin Mockel MD (Germany)
Julia Searle MD (Germany)
Tobias Lindner MD (Germany)
Johanna Bokemeyer MD (Germany)
Jorn Vollert MD (Germany)

Liaison Officer:
Ahmad Saleem MD

Date: Monday 19/11/2012
Time: 09:00 - 13:30
Hall: Prince Hamzah Auditorium (PHA)
Venue: King Hussein Medical Center

TIME	DETAILS
10.00	Welcome, introduction Martin Möckel
10.15	Overview, Emergency Medicine in Europe Martin Möckel
10.45	Scientific Emergency Medicine Julia Searle Introduction Scientific proposal Exercise in 4 small groups (7-8 people each) Wrap up
11.45	Break
12.15	Shock trauma room management - a German perspective Tobias Lindner
13.00	Discussion
13.15	The Chest Pain Unit Johanna Bokemeyer
13.45	Process optimization in the ED: Use of biomarkers Jörn Vollert
14.15	Take home messages Martin Möckel
14.30	End

W26
Gastroenterology
Upskilling Course in Colonoscopy
(Live Cases)

Guest:
John Anderson (UK)
Roland Valori (UK)

Liaison Officer:
Zakareya Mrayat MD

Date: Sunday 18/11/2012
Time: 08:00 - 16:00
Hall: Gastroenterology Unit (GI Unit)
Venue: King Hussein Medical Center

The workshop will be directed toward GI fellows so as to improve their colonoscopy skills in caecal intubation, polyp detection rate, reduce patient discomfort and time needed to finish the procedure.

W27
Neurology
Approach to the Patient With a Movement Disorder

Guest:
Niall Quinn (UK)

Liaison Officer:
Munir Daheyat MD
Majed Habahbeh MD

Date: Monday 19/11/2012
Time: 09:00 - 12:00
Hall: Physiology Hall (PH)
Venue: King Hussein Medical Center

During this workshop, real patients with difficult or complex movement disorders, including unusual tremors, jerky movements, dystonia, tics and atypical Parkinsonism will be presented to Professor Quinn. The aim will be to explain to the attendees how to differentiate these abnormal movements by analyzing the phenomenology of these movements (duration, regularity, speed , amplitude, triggers…etc.). This differentiation is very important as it the first step in formulating a differential diagnosis in any patient with a movement disorder. It is often straightforward but may be very difficult in practice and misdiagnosis is common. We are hoping to improve the diagnostic skills of attending neurologists and internist in this area.

W28
Dermatology
Fillers and Botulinum Toxin
(Live Cases)

Guest:
Anthony Benedetto MD (USA)

Liaison Officer:
Issam Omeish MD

Date: Thursday 22/11/2012
Time: 11:00 - 13:00
Hall: Physiology Hall (PH)
Venue: King Hussein Medical Center

The field of dermatosurgery and cosmetic dermatology is expanding rapidly nowadays.
In this workshop there will be live demonstration of injecting fillers and botulinum toxins on about 3-4 patients.
During the injection,there will be explanation and discussion about the different techniques, some pitfalls to avoid and how to acheive the maximum desired effect.
Safety procedure together with the satisfaction of the patient should be the target.

W29
Dentistry
Theory and Practice of Root Canal Re-treatment
(Separate Registration)

Guest:
Paul Dummer (UK)

Liaison Officer:
Dr Ehab Rasas

Date: Sunday 18/11/2012
Time: 09:00 - 15:00
Hall: Biomedical Engineering Institute (BEI)
Venue: King Hussein Medical Center

The aim of this hands-on workshop is to cover the principles of root canal re-treatment. Background information will be presented in the form of an evidence-based literature review. Participants will be able to practice the on extracted teeth and on simulated root canals.
Following the workshop you will:

1. Be aware of the standard of care expected when carrying out root canal re-treatment
2. Be aware of the role of micro-organisms in pulp and periradicular disease and the prognosis of root canal re-

treatment
3. Be aware of the complexity of tooth anatomy, particularly in terms of the pulp chamber and root canals
4. Be aware of the methods used to disassemble existing restorations, crowns and posts
5. Be aware of how to remove existing root filling materials
6. Understand the objectives of root canal preparation, including cleaning and shaping
7. Understand the objectives of root canal filling

TIME	DETAILS
8:00 – 8:30	Registration
8:30 – 10:00	Quality and standards in root canal retreatment; Tooth anatomy; Gaining access to the root canal – disassembly of restorations, crowns and posts.
10:00 – 10:30	Coffee break
10:30 – 12:00	Removing existing root filling materials; irrigants and medicaments; canal shaping and root filling
12:00 – 1:00	Lunch
1:00 – 4.00	Hands-on practice

W30
Dentistry
How to Develop your Clinical Skills and Improve your Performance in an Olympic Fashion?

Guest:
Rajesh Patel (UK)

Liaison Officer:
Dr Rania Samarah

Date: Monday 19/11/2012
Time: 09:00 - 13:30
Hall: Hall F
Venue: KHBTCC

The emphasis of this workshop is to discuss the ideas and changes an individual needs to make and appreciate to improve their performance. The Team GB cycling team aptly demonstrated this marginal gain and this success is down to ambition, commitment and a winning mentality.
I will share all my "tips and tricks" in managing challenging clinical cases in a variety of situation's and demonstrate some of the simple skills that can make a significant difference to the outcome.
There will be plenty of opportunity to be interactive and discuss cases that you have had to share ideas and thoughts, with the sole aim of doing the "right thing" at the "right time" for the "right" patient, which is often difficult when we are growing and developing as professionals.
At the end of the session I hope to have demonstrated some simple soft tissue surgical techniques, which you can then practice.
I will have explained and shared my approach to treatment planning which will help develop your own clinical protocols to drive a successful outcome at the beginning of the patient journey.

W31
Dentistry
Behavioral Management in Children: Pharmacological Techniques and Inhalation Sedation

Guest:
Richard Widmer (Australia)

Liaison Officer:
Dr Maen Al Far

Date: Tuesday 20/11/2012
Time: 11:30 - 16:00
Hall: Physiology Hall (PH)
Venue: King Hussein Medical Center

The workshop will examine in detail, the parameters of delivering safe modern dental health care to children. Attendees will be asked to role play several case scenarios. The use of inhalation sedation will be illustrated.

W32
Pharmacy
Pharmaceutical Care Medicines Management

Guest:
James C. McElnay PhD (UK)

Liaison Officer:
Col Emad Nsour

Date: Tuesday 20/11/2012
Time: 09:00 - 11:00
Hall: Hall I
Venue: KHBTCC

From a medicines management perspective, health care organizations across the worldface major challenges including suboptimal prescribing, poor patient adherence to prescribed medication regimens, adverse drug reactions and interactions, medication administration errors and inadequate communication across the primary/secondary care interface.
Furthermore, at a time of escalating health care costs, cost effective drug use has become an imperative, especially as expenditure on drugs is the second largest cost in health care.

The present workshop will explore how medicine use can be managed more effectively for the benefit of patient safety and therapeutic efficacy within a secondary care setting and how this medicines management process can be extended to the primary care setting. Issues that will be explored include medicines reconciliation at the time of admission to hospital, rationalisation of prescription list, careful monitoring during the patient's hospital stay, effective discharge (including communication with primary care practitioners) and continuity of optimised medication use in the primary care setting.

Participants will get the opportunity to discuss and construct a medicines management system which will ensure that patients get optimised outcomes from their prescribed medication within the different care settings.

W33
Pharmacy
Pharmacoeconomics Measuring and Estimating Costs

Guest:
Qais Alefan PhD (Jordan)

Liaison Officer:
Lt Col Kholoud Qoul

Date: Tuesday 20/11/2012
Time: 11:30 - 13:30
Hall: Hall I
Venue: KHBTCC

The Workshop explains what are pharmacoeconomics and its relation to health care policy. It introduces participants to the basics of pharmacoeconomics including, the importance of pharmacoeconomics, relationship of pharmacoeconomics to other research, measuring and estimating costs and types of pharmacoeconomic studies and their applications.

W34
Nursing
Developing the Skills for Effective Communication with the Cancer Patient and Their Families

Guests:
Sara Lister (UK)
Alexandra West Oram (UK)

Liaison Officer:
Col. Dr. Mohammad Banikhaled

Date: Wednesday 21/11/2012
Time: 09:00 - 11:00
Hall: Hall J
Venue: KHBTCC

Effective communication is widely regarded as a key determinant of patient satisfaction, compliance and recovery (Chant et al 2002: p 13). During this workshop skills known to be essential for effective communication such as active listening, developing a rapport with the patient, and appropriate verbal responses will be reviewed together using exercises and scenarios.

It is recognised that there is a personal, emotional impact when providing supportive communication , that can lead to blocking or avoiding patients emotional concerns (Faulkner and Maguire 1994) , so the participants will be invited to consider how skilled they are at encouraging patients to talk and the barriers that hinder them in communicating effectively with patients.
This will be followed by a discussion about the communication needs from the perspective of different family members particularly children. Stages of child development will be reviewed to help the workshop participants understand the needs of children in respect of communication about cancer.

W35
Nursing
Nurse Competence Evaluation

Guests:
Riitta Meretoja RN PhD (Finland)

Liaison Officer:
Col Hazem Fanash

Date: Wednesday 21/11/2012
Time: 14:30 - 16:30
Hall: Hall J
Venue: KHBTCC

Health care providers are increasingly inclined to question the quality and efficacy of the care they provide and are required to keep pace with rapid changes in health care and to provide high-quality patient care in a cost-effective manner. Although work to develop instruments for evaluating nurse competence has been going on for several decades, there is still little conceptually and methodologically sound research in this area. Research have focused upon a relatively narrow area of clinical practice, mostly on nurse students or on the nurse graduation phase. Criticism has been voiced over the validity and reliability of the instruments developed. Some of them are still in their early phases of development and further testing is quite limited. Whilst it is accepted that competence is challenging concept to operationalize and to measure, it is suggested that clinical assessment cannot be adequately undertaken until the evaluation instruments used are known to possess sound psychometric properties. Research to develop instruments for competence measurements has been motivated by a growing recognition for the need to recognise and improve nurse competence. However, the inherent complexity of nurse competence, the many and varied dimen-sions involved, mean that the task of assessment is itself one of great difficulty. The repetition of items from available instruments would save researchers from the trouble of having to create new ones and at the same time produce greater psychometrical soundness through repeated testing.
Learner objectives:

At the end of this symposium the participants should be able to understand how to de-velop, test and apply instruments designed for purposes of assessing the competence of practising nurses on the novice to expert continuum. Furthermore, the psychometric properties and especially the aspects of establishing validity and reliability of the com-petence instruments are discussed.

W36
Speech Therapy
Differential Diagnosis & Management of Voice & Upper Airway Problems

Guests:
Gayle Woodson MD (USA)

Liaison Officer:
Abdelrahim Ateyeh PhD

Date:
Friday 16/11/2012 (08:00 - 16:00)
Saturday 17/11/2012 (08:00 - 16:00)
Sunday 18/11/2012 (08:00 - 16:00)
Monday 19/11/2012 (08:00 - 13:30)

Hall: National Center for Amputee Rehabilitation (NCAR)
Venue: King Hussein Medical Center

This four day workshop will focus on the differential diagnosis and, both surgical and nonsurgical, management of voice problems as well as certain upper

airway problems. A one day of patient consultations will be followed by two days of surgical management of selected cases. Post-op examinations will be held on the fourth day. Participants are RMS otolaryngologists and voice therapists.

Friday 16 Nov

9:30 - 12:30
Patient consultation
12:30 - 13:30
Lunch
13:30 - 15:00
Patient consultation

Sat **17** Nov

a.m.: more patient consultation
p.m.: Phonosurgery

Sun **18** Nov

Phonosurgery

Mon **19** Nov

8:30 - 12:00
Post-op round & patients' assessment

W37
Medical Nutrition
Medical Nutrition Therapy in the Hospital Setting: Advancement & Techniques

Guests:
Annalynn Skipper PhD (USA)

Liaison Officer:
Abdelrahim Ateyeh PhD

Date:
Saturday 17/11/2012 (09:00 - 15:30)
Sunday 18/11/2012 (09:00 - 15:30)
Monday 19/11/2012 (09:00 - 13:30)

Hall: Princess Muna College Auditorium (PMCA)
Venue: King Hussein Medical Center

This two days and a half workshop will be done under the supervision of Annalynn Skipper, PhD. R.D. It will be geared toward providing the medical nutrition therapist the basic expertise in utilizing the appropriate intake of specific food and nutrients in improving health and preventing disease. Participants will learn the role of the dietitian in managing medical entities such as weight control, endocrine abnormalities, renal problems (Dialysis), rehabilitation, pediatric metabolic disorders, pediatric behavioral problems, GI problems, dysphagia, heart conditions, etc. Also, participants will learn the criteria of providing sufficient nutrients for parenteral feeding.

Saturday 17 November

Time	Title
09:00 – 09:30	The Importance of Nutrition in the Hospital Setting (practical Aspects)
09:30 – 10:00	The Role of the Dietitian in the USA
10:00 - 10:30	Coffee Break
10:30 - 12.30	Nutritional care plan : – Assessment & Evaluation – Nutritional Diagnosis – Planning Management & Intervention
12:30-13:30	Lunch
13:30- 14:30	Malnutrition in the hospitalized patients Discussion
14:30-15:30	Nutritional Care In Diabetic Patients

Sunday 18 November

Time	Title
09:00–10:00	Nutritional Care In Cardiovascular diseases
10.00–10:45	Nutritional care of ICU Patients Parenteral Nutrition
10:45-11:15	break
11:15-12:30	Management of obesity
12.30-13.30	Lunch
13.30-14-15	Case study – heart disease patient
14.15-15.00	Visit to the Children Hospital
15.00-15:30	Visit to the Renal Unit

Monday 19 November

Time	Title
9:00 – 9:45	Nutritional Care In Renal diseases
9:45 – 10:30	Nutritional Care In liver diseases
10:30 - 11.00	Break
11.00-11.45	Metabolic disorders nutrition
11:45 – 12:30	The Role of Nutrition in Child development & behavior
12.30-1.30	Lunch
13.30	Closing and departure for the Opening Ceremony of the Conference

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