

# **Royal Medical Services**

# **Professional Training Division**

# **Logbook for Endodontic Residents**

## FIRST YEAR

- 1. Growth, development and histology of head and neck.
  - a. Branchial arches.
  - b. Development of tongue.
  - c. Tooth germs.
  - d. Eruption.
  - e. Tooth structures.
  - f. Histology of dental pulp.
- 2. Anatomy of head and neck.
  - General anatomy.
    - a. Neck triangles.
    - b. Neck spaces.
    - c. Salivary glands.
    - d. Muscles of facial expression.
    - e. Muscles of mastication.
    - f. Cranial nerves; trigeminal, facial, glosso pharyngeal, hypoglossal.
    - g. Blood supply of head and neck.
    - h. Lymphatic drainage of head and neck.

- Oral and dental anatomy.
  - a. Lips and cheeks.
  - b. Teeth (enamel, dentine, pulp and cementum).
  - c. Anatomy of dentin pulp complex
  - d. Floor of mouth.
  - e. Soft and hard palate.
  - f. TMJ.
  - g. Tongue.

### 3. Physiology.

- a. Saliva.
- b. Mastication and swallowing.
- c. Jaw reflexes.
- d. Taste oral sensation and receptors.
- e. Blood, lymphatics and immune mechanism
- f. Nerve + Synaptic and Junctional Transmission
- g. Physiology of dental pulp
- h. Endodontics microbiology.

- 4. General pathology
  - a. Cell injury.
  - b. Inflammation and infection.
  - c. Wound healing.
  - d. Thrombo-embolism.
  - e. Shock and hemorrhage.
  - f. Neoplasia.
  - g. Pulpal pathology.
- 5. Pharmacology
  - a. Antibiotics.
  - b. Analgesics.
  - c. Antifungal.
  - d. Antiviral.
  - e. Local anesthesia.
- 6. Instruments, materials
  - a. manual instruments
  - **b.** irrigants
  - c. intracanal medicaments
  - d. sealers
  - e. Obturation materials
  - f. intermediate restoration materials
- 7. Structure and functions of the dentin pulp complex
- 8. Pulp reactions to caries and dental procedures

## SECOND YEAR

#### **Theoretical requirements:**

- 1- Structure and function of the dentin pulp complex
- 2- Pulp reaction to caries and dental procedures
- 3- Pathobiology of primary apical periodontitis
- 4- Endodontic microbiology and treatment of infections.
- 5- Diagnosis and management of endodontic emergencies.
- 6- Orofacial pain mechanism and non odontogenic toothache.
- 7- Case selection and treatment planning.
- 8- Preparation of endodontic treatment.
- 9- Armamentarium and sterilization.
- 10- Tooth morphology and access cavity preparation
- 11- Endodontic Instruments, materials and devices.
- 12- Cleaning and shaping of the root canal system
- 13- Obturation of the cleaned and shaped root canal system.
- 14- The role of endodontics after dental traumatic injuries.
- 15- Endodontic and Periodontal interrelationship.
- **16-Analgesic in endodontics**
- 17-Local anesthesia in Endodontics
- Clinical requirements:
- 1-To do root canal treatment for 30 posterior teeth (advanced & challenging)
- 2-To do five cases of retreatment.

# ALL THE CASES SHOULD BE DOCUMENTED WITH RADIGRAPHS AND PATIENT FILES.

# THITRD YEAR

## **Theoretical requirements:**

- 1- Restoration of endodontically treated teeth.
- 2- Pediatric endodontics
- **3-** Geriatric endodontics
- 4- Pathobiology of post treatment apical periodontitis
- 5- Non surgical retreatment
- 6- Periradicular surgery
- 7- Regeneration and revascularization
- 8- Bleaching
- 9- Advancements in Endodontics (materials, devices, techniques)
- 10- Outcome studies.

### **Clinical requirements:**

- 1- To do root canal treatment for 20 posterior teeth (advance and challenging cases).
- 2- The resident should perform 5 periradicular surgeries.
- **3-** To do five cases of retreatment.

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