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Better Pharmacist Knowledge

Jordan Drug Information and Toxicology Center 2021

Anticoagulation intensity in people hospitalized for COVID-19 (March 2021, Modified June 2021)

Thromboembolic complications of severe COVID-19 are common in hospitalized patients, especially in the intensive care unit (ICU), but the optimal approach to venous thromboembolism (VTE) prophylaxis has been unclear. Limited data from the early months of the pandemic suggested that increased dosing intensity might be reasonable. However, recent randomized trials have found that **prophylactic dose anticoagulation is equally effective as higher doses of anticoagulation in reducing VTE risk**, including in patients in the ICU, with trends towards lower rates of bleeding. [1]

Drug – drug interaction between Sirdalud® (Tizanidine) and systemic ciprofloxacin.

Do not use tizanidine with ciprofloxacin. This combination is listed as a **contraindication**. The suspected primary mechanism of this interaction is inhibition of CYP1A2-mediated tizanidine metabolism by ciprofloxacin. Use of tizanidine with ciprofloxacin is considered contraindicated. Other quinolones such as **gatifloxacin, gemifloxacin, levofloxacin, lomefloxacin, or moxifloxacin may be safer alternatives** in tizanidine-treated patients, since they are generally believed to have little, if any, effect on CYP450 1A2. [2]

Third dose of COVID-19 mRNA vaccine for solid organ transplant recipients (July 2021)

Previous studies have shown that the immune response to a two-dose mRNA vaccine is lower in solid organ transplant (SOT) recipients; however, the efficacy and safety of additional doses of vaccine in this patient population are **uncertain**. In two recent studies, administration of a third dose of an mRNA vaccine to SOT recipients who had not previously had a detectable antibody response improved the immune response without causing any short-term serious adverse events. However, in one report, one of 30 patients developed acute rejection after the third dose of vaccine. **The necessity and safety of administering third doses of an mRNA vaccine are unclear**; **third doses should not be routinely given outside of the context of research protocols**. [4]

IVIG for vaccine-induced immune thrombotic thrombocytopenia (June 2021)

Vaccine-induced immune thrombotic thrombocytopenia (VITT) is a rare adverse effect of certain **adenoviral vector-based COVID-19 vaccines**. By analogy to autoimmune heparin-induced thrombocytopenia, treatment with a **non-heparin anticoagulant and administration of intravenous immune globulin (IVIG) has been proposed**. A new series of three individuals with VITT has documented that administration of **high-dose IVIG was associated with rapid increases in platelet counts**, no new thromboses, and in vitro evidence of reduced platelet activation .These findings support our suggestion to administer **IVIG** to all individuals with confirmed or strongly suspected VITT, **along with a non-heparin anticoagulant.** [3]

Lamotrigine in bipolar disorder (May 2021)

Lamotrigine is often used for bipolar major depression, but may be associated with an increased risk of **arrhythmias** in patients **with pre-existing cardiac disease**. Following reports of chest pain and cardiac arrest in patients treated with lamotrigine, the US FDA conducted in vitro studies of the drug. The results prompted the agency to issue a warning that lamotrigine can slow ventricular conduction and increase the risk of serious arrhythmias in patients with clinically important structural or functional cardiac disease, multiple risk factors for coronary artery disease, or using other sodium channel blockers. Although the benefits of lamotrigine in patients with bipolar disorder and underlying heart disease may outweigh the risks, **we suggest that clinicians attempt to avoid using the drug in these patients**. [5]

References:

1. What's new in drug therapy, accessed online via UpToDate
2. JDITC (Jordan Drug Information and Toxicology Center) Enquiries.
3. IVIG for vaccine-induced immune thrombotic thrombocytopenia , accessed online via UpToDate
4. What's new in infectious diseases, accessed online via UpToDate.
5. Bipolar disorder, accessed online via UpToDate.

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FDA requests removal of strongest warning against using cholesterol-lowering statins during pregnancy

On July 20, 2021, FDA requested removal of its strongest warning against using cholesterol-lowering statin medicines in pregnant patients. Despite the change, most patients should stop statins once they learn they are pregnant. We have conducted a comprehensive review of all available data and are requesting that statin manufacturers make this change to the prescribing information as part of FDA's ongoing effort to update the pregnancy and breastfeeding information for all prescription medicines.

Patients should not breastfeed when taking a statin because it may pass into breast milk and pose a risk to the baby. Many can stop statins temporarily until breastfeeding ends. However, patients requiring ongoing statin treatment should not breastfeed and instead use infant formula or other alternatives.

Because the **benefits of statins may include prevention of serious or potentially fatal events in a small group of very high-risk pregnant patients, contraindicating these drugs in all pregnant women is not appropriate.**

FDA expects removing the contraindication will enable health care professionals and patients to make **individual decisions about benefit and risk**. [6]

Diuretics; including acetazolamide Risk of eye disorders

Health Canada has announced that they will work with manufactures of diuretics (such as hydrochlorothiazide, chlorthalidone, indapamide) and acetazolamide, to update the safety information by adding a **warning about the risks of choroidal effusion (CE), acute myopia (AM) and acute angle-closure glaucoma (AACG).** Diuretics are indicated to treat oedema and to lower high blood pressure.

Acetazolamide has diuretic properties and indicated to treat glaucoma and certain types of seizures. Triggered by updates made to the product safety information by the EMA, Health Canada reviewed the risks of CE, AM and AACG with the use of diuretics including acetazolamide has information on the eye disorders. Assessment of whether additional actions are required were made. [7]

Hydrocortisone; Risk of acute adrenal insufficiency in children when switching from tablets to granules

The Medicines and Healthcare Products Regulatory Agency (MHRA) has announced that the product information for hydrocortisone granules (Alkindi®) will be updated following a report of an infant developing **severe adrenal insufficiency when switched from hydrocortisone soluble tablets to hydrocortisone granules.** Hydrocortisone granules are indicated for replacement therapy of adrenal insufficiency in infants, children and adolescents. Parents or carers should be advised to observe the child carefully in the first week after the switch. Also, the prescriber should instruct parents and carers what to do if the child develops **any symptoms of adrenal insufficiency such as tiredness, floppiness, temperature instability, headache or vomiting**. If a child requires additional dosing during the first week after the switch, an increase in the daily dose of hydrocortisone granules should be considered. [7]

COVID-19 vaccine Spikevax approved for children aged 12 to 17 in EU

EMA's human medicines committee (CHMP) has recommended granting an extension of indication for the COVID-19 **vaccine Spikevax (previously COVID-19 Vaccine Moderna) to include use in children aged 12 to 17 years.** The use of the Spikevax vaccine in children from 12 to 17 years of age will be the same as in older people. It is given as two injections in the muscles of the upper arm, four weeks apart.

The effects of Spikevax have been investigated in a study involving 3,732 children aged 12 to 17 years. This ongoing study is being carried out in accordance with Spikevax's paediatric investigation plan (PIP) and agreed by EMA's Paediatric Committee. The most common side effects in children aged 12 to 17 are similar to those in people aged 18 and above. These effects are usually mild or moderate and improve within a few days.

The CHMP noted that due to the limited number of children and adolescents included in the study, the trial could not have detected new uncommon side effects or estimated the risk of known side effects such as myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the membrane around the heart).The safety and efficacy of the vaccine in both children and adults will continue to be monitored closely as it is used in vaccination campaigns across the Member States, through the EU pharmacovigilance system and ongoing and additional studies by the company and by European authorities. [8]

References:

6. FDA Drug Safety Podcast, accessed online via www.fda.gov.
7. WHO Pharmaceuticals newsletter No. 2, 2021, accessed online via World Health Organization.
8. COVID-19 vaccine Spikevax approved for children aged 12 to 17 in EU, accessed online via www.ema.europa.eu.

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