February

Better Pharmacist Knowledge

Jordan Drug Information and Toxicology Centre 2024

2024

Time window to start dual antiplatelet therapy for high-risk TIA or minor ischemic stroke (January 2024)

There is evidence from several randomized trials that early initiation of **short-term dual antiplatelet therapy** (DAPT) for select patients with high-risk transient ischemic attack (TIA) or minor ischemic stroke **reduces the risk of recurrent ischemic stroke**. The evidence comes from trials that started DAPT within 12 to 24 hours of symptom onset. Results from the recent INSPIRES trial suggest that DAPT is still beneficial when started up to 72 hours after symptom onset. Although the time window is extended by the results from INSPIRES, we start DAPT as soon as possible for patients with high-risk TIA or minor ischemic stroke. [1]

Esketamine for treatment-resistant depression (December 2023)

Although **esketamine** has established efficacy for treatment-resistant depression, direct comparisons with other agents are limited. In a recent open label randomized trial in 676 adults with treatment-resistant major depression receiving baseline antidepressant therapy, **addition of esketamine nasal spray for 32 weeks led to higher remission rates than addition of quetiapine extended release** (XR, 49 versus 33 percent). Rates of discontinuation for adverse events were nearly three times lower with esketamine than quetiapine XR (4 versus 11 percent). Nevertheless, clinicians and patients considering esketamine need to **weigh its benefits and disadvantages**, including the need to administer it in a certified medical clinic.[2]

Phosphodiesterase type 5 inhibition for Raynaud phenomenon (January 2024)

Phosphodiesterase type 5 (PDE5) inhibitors such as **sildenafil** and **tadalafil** are widely used to treat **digital ischemia from Raynaud phenomenon**. In an updated meta-analysis of nine randomized trials comprising 411 patients with Raynaud phenomenon (most of whom had scleroderma), **treatment with PDE5 inhibition resulted in three fewer attacks weekly** and a **reduction in the average duration of the attacks by five minutes**. However, PDE5 inhibition led to minimal to no reduction in the pain associated with Raynaud phenomenon. This study implies that while PDE5 inhibition has a modest impact on the duration and frequency of Raynaud attacks, it might not be adequate to address all symptoms experienced by patients with severe disease. [3]

Janus kinase inhibition to preserve insulin secretion in early onset type 1 diabetes (January 2024)

In type 1 diabetes, the janus kinase (JAK)/signal transducer and activator of transcription (STAT) pathway has been implicated in immune-mediated beta cell destruction. In a trial in 91 individuals (aged 10 to 30 years) with new-onset type 1 diabetes (diagnosed within 100 days), participants were randomly assigned to daily treatment with the oral JAK1/2 inhibitor **baricitinib** (n = 60) or placebo (n = 31). After 48 weeks of therapy, **insulin secretion was greater with baricitinib** compared with placebo (median stimulated mean C-peptide level 0.65 versus 0.43 nmol/L per minute, respectively). A1C, frequency of hypoglycemia, and the percentage of time spent in the target glucose range (70 to 180 mg/dL [3.9 to 10 mmol/L]) were not significantly different between groups. **JAK/STAT pathway inhibition is a promising strategy for preserving insulin secretion in new-onset type 1 diabetes**. [4]

References:

1. Time window to start dual antiplatelet therapy for high-risk TIA or minor ischemic stroke (January 2024), accessed online via uptodate , cited on 29 Jan 2024.
2. Esketamine for treatment-resistant depression (December 2023), accessed online via uptodate , cited on 29 Jan 2024.
3. Phosphodiesterase type 5 inhibition for Raynaud phenomenon (January 2024), accessed online via uptodate, cited on 29 Jan 2024.
4. Janus kinase inhibition to preserve insulin secretion in early onset type 1 diabetes (January 2024), accessed online via uptodate, cited on 29 Jan 2024.

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Prolia (Denosumab) - FDA Adds Boxed Warning for Increased Risk of Severe Hypocalcemia in Patients with Advanced Chronic Kidney Disease (January 2024)

Based on a completed FDA review of available information, FDA has concluded that the osteoporosis medicine Prolia (Denosumab) **increases the risk of severe hypocalcemia**, very low blood calcium levels, **in patients with advanced chronic kidney disease (CKD), particularly patients on dialysis**. Severe hypocalcemia appears to be more common in patients with CKD who also have a condition known as mineral and bone disorder (CKD-MBD). In patients with advanced CKD taking Prolia, severe hypocalcemia resulted in serious harm, including hospitalization, life-threatening events, and death. As a result, the FDA is revising the Prolia prescribing information to include a new **Boxed Warning**, FDA's most prominent warning, communicating this increased risk.

Severe hypocalcemia can be asymptomatic or may present with symptoms that include confusion; seizures; irregular heart rhythm; fainting; face twitching; uncontrolled muscle spasms; or weakness, tingling, or numbness in parts of the body.[1]

Meta-Analysis: Suicide Risk Not Increased with Isotretinoin (December 2023)

Isotretinoin users have **no increased risk of suicide or psychiatric conditions on a population level**, a meta-analysis of 25 studies that included 1.6 million patients suggests.

Instead, those who are treated with the drug for severe acne **may have a lower risk of suicide attempts 2-4 years after treatment**, wrote the authors, led by Nicole Kye Wen Tan, MBBS, of Yong Loo Lin School of Medicine at the National University of Singapore.

The analysis showed that the 1-year absolute risk from between two and eight studies of suicide attempts, suicidal ideation, completed suicides, and self-harm were each less than 0.5%. For comparison, the absolute risk of depression was 3.83% (95% confidence interval [CI], 2.45-5.93; I^2 [measuring heterogeneity] = 77%) in 11 studies.[2]

تعميم صادر عن المؤسسة العامة للغذاء والدواء

إشارة إلى التحذير الصادر من قبل الـ FDA بتاريخ 2023/11/28 بخصوص الـ Antiseizure medicines (Levetiracetam and Clobazam) حيث ورد التالي:

The FDA is warning that the antiseizure medicines (levetiracetam) and (clobazam), can cause a rare but serious reaction that can be life threatening if not diagnosed and treated quickly. This reaction is called **Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS).** It may start as a rash but can quickly progress, resulting in injury to internal organs, the need for hospitalization, and even death. This hypersensitivity reaction to these medicines is serious but rare. **DRESS** can include fever, rash, swollen lymph nodes, or injury to organs including the liver, kidneys, lungs, heart, or pancreas.

***Recommendations for Health Care Professionals*:**

- Health care professionals should be aware that prompt recognition and early treatment is important for improving DRESS outcomes and decreasing mortality. Diagnosis is often difficult because early signs and symptoms such as fever and swollen lymph nodes may be present without evidence of a rash.
- DRESS can develop 2 weeks to 8 weeks after starting the medicines, and symptoms and intensity can vary widely.
- DRESS can also be confused with other serious skin reactions such as Steven-Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN).
- Advice patients of the signs and symptoms of DRESS and to stop taking their medicine and seek immediate medical attention if DRESS is suspected during treatment with levetiracetam or clobazam.

علماً بأن المؤسسة تقوم بمتابعة تحديث نشرات الأدوية المسجلة لديها المحتوية على المادة الفعالة (Levetiracetam) لتعكس هذا التحذير، بينما لا يوجد أدوية مسجلة تحتوي على المادة الفعالة (Clobazam) حتى تاريخه.[3]

References:

1. Prolia (denosumab) - FDA Adds Boxed Warning for Increased Risk of Severe Hypocalcemia in Patients with Advanced Chronic Kidney Disease (January 2024), accessed online via Drugs.com. cited on 29 Jan 2024.
2. Meta-Analysis: Suicide Risk Not Increased With Isotretinoin (December 2023), accessed online via Medscape, cited on 29 Jan 2024.
3. JFDA.

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