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Anti-factor Xa levels 24 hours after the last therapeutic enoxaparin dose (April 2024)

Guidelines recommend **waiting 24 hours after a therapeutic dose of low molecular weight heparin (LMWH)** before performing neuraxial anesthesia, **to minimize the risk of spinal epidural hematoma (SEH)**. However, anti-factor Xa levels (which test LMWH activity) may still be elevated 24 hours after the last dose. In a study of 103 patients taking therapeutic dose enoxaparin, 23 percent had an anti-factor Xa level ≥0.2 international units/mL at ≥24 hours after the last dose. The implications of these findings are unclear, as a safe anti-factor Xa level for performing neuraxial procedures has not been determined and there has not been a noticeable increase in SEH in patients who have withheld LMWH according to current guidelines.[1]

Intravenous iron in heart failure (April 2024)

Individuals with heart failure (HF) and iron deficiency should be treated, but expert groups differ on the perceived benefits. In a new meta-analysis that included over 4500 patients participating in randomized trials, **intravenous iron reduced the rate of cardiovascular hospitalizations** compared with placebo; all-cause mortality was not reduced. This supports our suggested approach of using intravenous iron, although oral iron may be reasonable. **Iron supplementation should be stopped once stores are repleted, as excess iron deposition is cardiotoxic**.[2]

Updated guidelines for the management of acne vulgaris (May 2024)

The American Academy of Dermatology published updated guidelines for the management of acne vulgaris. The guidelines continue to support multiple treatment measures, such as combined use of topical agents with different mechanisms of action; limited duration of antibiotic treatment; topical or systemic antibiotic treatment only in conjunction with topical benzoyl peroxide; and oral isotretinoin treatment for severe acne, acne that has not responded adequately to standard oral or topical treatment, and acne associated with psychosocial burden or scarring.[3]

Andexanet alfa for anticoagulation reversal in intracerebral hemorrhage (May 2024)

The optimal reversal strategy for factor Xa inhibitors in acute intracerebral hemorrhage (ICH) is uncertain. In the ANNEXA-I trial, which randomly assigned 530 patients with factor Xa inhibitor-associated ICH to andexanet alfa or standard care (typically including a prothrombin complex concentrate [PCC]), **patients assigned to andexanet achieved a higher rate of hemostasis than those assigned to standard therapy** (67 versus 53 percent). However, thrombotic events were more common in patients receiving andexanet (10.3 versus 5.6 percent). Mortality and functional outcomes at 30 days were similar. Based on these results, we individualize selection of andexanet alfa or PCC for Xa inhibitor reversal in acute ICH. **Andexanet may restore hemostasis more effectively than PCC but is associated with a higher thrombotic risk**.[4]

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Selenium deficiency and autoimmune thyroid disease (April 2024)

Selenium deficiency has been shown to exacerbate autoimmune thyroid disease. Reports of selenium supplementation for the treatment of Hashimoto thyroiditis are conflicting. In a recent meta-analysis evaluating selenium supplementation in individuals from selenium-deficient regions (eg, Europe and Asia) with Hashimoto thyroiditis, there was a reduction in thyroid-stimulating hormone in patients who were not receiving thyroid hormone replacement (seven trials; standard mean difference -0.21). This modest benefit is likely restricted to people from selenium-deficient regions of the world. In the United States, the soil in most states is rich in selenium, suggesting selenium deficiency is rare.[1]

Smoking cessation strategies after failing initial pharmacotherapy (May 2024)

Several medications are effective for smoking cessation; however, optimal management of individuals who do not abstain with initial pharmacotherapy has been unclear. In a recent trial, participants who smoked at least five cigarettes daily and had previously been randomized to receive six weeks of varenicline (2 mg daily) or combination nicotine replacement therapy (NRT; 21 mg/day patch plus lozenges) but did not quit smoking were re-randomized to continue the same medication dose, increase the dose, or switch medications. Among those who initially received varenicline, **12-week quit rates were highest with increasing the dose to 3 mg daily**, compared with continuing the 2 mg dose or switching to NRT (20, 3, and 0 percent, respectively). Among those who initially received NRT, quit rates with increased dosing (two 21 mg/day patches) or switching to varenicline were higher than continuing standard dosing (14, 14, and 8 percent, respectively). These results suggest that for patients unable to quit with standard-dose varenicline or NRT, **using higher doses is an effective option**.[2]

Glucocorticoid plus mycophenolate for autoimmune hepatitis (May 2024)

Mycophenolate, an antimetabolite, is under investigation for inducing remission in adults with autoimmune hepatitis (AIH). In a trial including 70 adults with AIH, **prednisolone plus mycophenolate mofetil resulted in higher rates of biochemical remission at six months** compared with prednisolone plus azathioprine (56 versus 29 percent). Rates of serious adverse events and drug discontinuation were lower in the mycophenolate group (0 versus 13 percent and 5 versus 26 percent, respectively). These data show promise, and we anticipate using combination therapy with a glucocorticoid plus mycophenolate as an option for patients with AIH who are at risk for side effects from high-dose glucocorticoid monotherapy.[3]

Acetaminophen use in pregnancy not associated with adverse neurodevelopment in offspring (April 2024)

Although older studies raised concerns about a possible adverse association between in utero exposure to acetaminophen and neurodevelopment, more **recent studies with a lower risk of bias have not reported an association.** In a population-based study in which acetaminophen use was prospectively recorded, siblings with any in utero exposure had **no increased risk for attention deficit hyperactivity disorder, autism spectrum disorder, or intellectual disability at age 10 years compared with their unexposed siblings**. Although an association cannot be definitively excluded, these data are reassuring when a short course of acetaminophen is desirable to manage pain or fever during pregnancy.[4]

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