Dexmedetomidine in ICU Patients With Delirium

Agitated delirium is particularly problematic among patients receiving mechanical ventilation. In a randomized trial involving 74 adult patients in the intensive care unit (ICU) considered ineligible for extubation because of the severity of agitation and delirium, Reade and colleagues examined the effect of dexmedetomidine added to standard care on ventilator-free time. The authors report that compared with standard care alone, the addition of dexmedetomidine resulted in more ventilator-free hours in the 7 days after randomization. In an Editorial, Ely and Pandharipande discuss evolving treatment of brain dysfunction in critically ill patients.

Secondary Infections Among Patients With Sepsis

In a prospective study involving consecutive intensive care unit (ICU) admissions (1504 patients with sepsis and 1825 patients without sepsis at admission), van Vught and colleagues assessed the incidence, associated risk factors, and attributable mortality of ICU-acquired infections. Among the authors’ findings was that ICU-acquired infections occurred more commonly among patients with sepsis and a higher disease severity score when admitted to the ICU; however, such secondary infections contributed only modestly to overall mortality. In an Editorial, Angus and Opal discuss immune system dysfunction and secondary infections among critically ill patients.

QI Intervention to Reduce Mortality Among Critically Ill Adults

The effectiveness of quality improvement (QI) interventions such as checklists, daily goal assessments, and clinician prompts to improve patient outcomes in intensive care units (ICUs) is not clear. In a cluster randomized trial that enrolled 6761 adult patients treated in 118 ICUs in Brazil, Cavalcanti and colleagues found that compared with usual care, a multifaceted QI intervention that included checklists, daily goal assessments, and clinician prompts did not reduce in-hospital mortality of critically ill patients.

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Editor in Chief
Howard Bauchner, MD

132 YEARS
OF CONTINUOUS PUBLICATION

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Research (continued)

Air Quality Improvement and Bronchitic Symptoms in Children

In a longitudinal study that enrolled 4602 children aged 5 to 18 years who resided in 8 Southern California communities from 1993 to 2012, Berhane and colleagues assessed the relationship between improvements in average ambient air quality and respiratory symptoms in the children during the prior 12 months. The authors found that decreases in ambient pollution levels were associated with significant reductions in bronchitic symptoms in children.

Clinical Review & Education

Does This Patient Have Infectious Mononucleosis?

Mononucleosis is a relatively common cause of sore throat among individuals aged 5 to 25 years. Ebell and colleagues conducted a systematic review to assess the evidence regarding the value of clinical examination findings and the white blood cell count for the diagnosis (11 studies identified; 4769 patients total). The authors found that among adolescent or adult patients presenting with sore throat, the presence of posterior cervical, inguinal or axillary adenopathy, palatine petechiae, splenomegaly, or an atypical lymphocytosis increases the likelihood of mononucleosis.

Management of Atopic Dermatitis

This JAMA Clinical Guidelines Synopsis article by Stein and Cifu summarizes the American Academy of Dermatology guideline for the management and treatment of atopic dermatitis with topical therapies. Strong evidence supports the use of nonpharmacologic moisturizers. Topical corticosteroids are recommended when nonpharmacologic measures have failed. Topical calcineurin inhibitors are recommended as steroid-sparing agents.

Safety of Testosterone Replacement Therapy

This Medical Letter on Drugs and Therapeutics article summarizes the current evidence relating to the safety of testosterone replacement therapy. To date, there is no convincing evidence that testosterone replacement therapy increases the risk of prostate cancer. Some studies have found an association between testosterone replacement therapy and cardiovascular events, but others have not.

JAMA Cardiology

The JAMA Network welcomes JAMA Cardiology to the family of journals. cardiology.jamanetwork.com

Author Interview

Interview with Mark Herbert Ebell, MD, MS, author of “Does This Patient Have Infectious Mononucleosis? The Rational Clinical Examination Systematic Review”

Online @ jama.com

Editor's Audio Summary

Howard Bauchner, MD, summarizes and comments on this week’s issue.

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