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Research

Etelcalcetide and Parathyroid Hormone in Patients Receiving Dialysis 146

Secondary hyperparathyroidism is a major complication of chronic kidney disease, particularly among patients receiving hemodialysis. In 2 parallel, randomized, placebo-controlled clinical trials, which together enrolled 1023 patients who were receiving hemodialysis and had moderate to severe secondary hyperparathyroidism, Block and colleagues evaluated the effect of etelcalcetide—a calcimimetic agent administered intravenously after each hemodialysis session—on serum parathyroid hormone (PTH) concentration. The authors report that compared with placebo, use of etelcalcetide resulted in greater reduction in serum PTH levels over 26 weeks. In an Editorial, Middleton and Wolf discuss the potential for calcimimetic therapy to improve outcomes in patients with end-stage renal disease.

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Etelcalcetide vs Cinacalcet in Secondary Hyperparathyroidism

Treatment of secondary hyperparathyroidism among patients receiving hemodialysis is often suboptimal. In a randomized clinical trial that enrolled 683 patients receiving hemodialysis and having moderate to severe secondary hyperparathyroidism, Block and colleagues assessed the efficacy of 2 calcimimetics—either intravenous etelcalcetide or oral cinacalcet—to reduce serum PTH levels. The authors found that use of etelcalcetide was not inferior to cinacalcet in achieving more than 30% reduction from baseline in predialysis PTH concentrations over 26 weeks.

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Global Burden of Hypertension and Elevated Systolic Blood Pressure 165

Elevated systolic blood pressure (SBP) is a leading global health risk. Based on an analysis of data from 844 studies (n = 8.69 million participants) published between 1980 and 2015, Forouzanfar and colleagues estimated associations between elevated SBP and the burden of different causes of death and disability by age and sex for 195 countries. The authors report that the rate of elevated SBP (≥110-115 mm Hg and ≥140 mm Hg) increased substantially between 1990 and 2015, and disability-adjusted life-years and deaths associated with elevated SBP also increased. In an Editorial, Huffman and Lloyd-Jones discuss implications of the study findings for developing population-level hypertension risk-reduction strategies.

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Clinical Review & Education

Folic Acid Supplementation to Prevent Neural Tube Defects

Daily folic acid supplementation in the periconceptional period can prevent neural tube defects. However, most women of childbearing age do not achieve the recommended intake of folate from diet alone. This US Preventive Services Task Force (USPSTF) recommendation statement addresses folic acid supplementation in women of childbearing age to prevent neural tube defects in the developing fetus. Based on a review of the evidence relating to benefits and harms of folic acid supplementation, the USPSTF recommends that all women who are planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mg (400-800 µg) of folic acid. In an Editorial, Mills discusses folic acid supplementation and folate fortification of foods to prevent folate-related neural tube defects.

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Folic Acid to Prevent Neural Tube Defects: Evidence Report

Viswanathan and colleagues summarize findings from the USPSTF review of the evidence from 24 studies (N > 58 860 participants) of folic acid supplementation for preventing neural tube defect-affected pregnancies in women of childbearing age. Evidence was sought to address questions relating to differences in risk reduction or harms by race or ethnicity or by dosage, timing, or duration of therapy. The evidence review found that prior to 1998 and the initiation of folate fortification of foods in the United States, folic acid supplementation provided protection against neural tube defects. Newer postfortification studies have not consistently demonstrated a protective association but have the potential for misclassification and recall bias.

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Patient-Reported Outcomes After LASIK

An article in JAMA Ophthalmology reported findings from web-based patient surveys that assessed visual symptoms and satisfaction after laser in situ keratomileusis (LASIK) surgery. This From The JAMA Network article by Sugar and colleagues discusses the use of patient-reported visual quality of life before and after LASIK procedures to enhance preoperative patient counseling and to identify ways to reduce postoperative symptoms.

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Editor's Audio Summary

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

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Author Interview



AUDIO Interview with Alex R. Kemper, MD, MPH, MS, author of "Folic Acid Supplementation for the Prevention of Neural Tube Defects: US Preventive Services

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