

# THIS WEEK in the JOURNAL

## ORIGINAL ARTICLE

### Aprotinin versus Lysine Analogues in High-Risk Cardiac Surgery

In this clinical trial involving patients undergoing high-risk cardiac surgery, aprotinin was somewhat more effective than either aminocaproic acid or tranexamic acid in reducing massive perioperative bleeding but at the expense of a higher rate of death, mainly from cardiac causes. Aprotinin cannot be recommended to control blood loss in this clinical setting.

SEE P. 2319; EDITORIAL, P. 2398

## ORIGINAL ARTICLE

### Methylnaltrexone for Opioid-Induced Constipation in Advanced Illness

This study investigated the safety and efficacy of subcutaneous methylnaltrexone, a  $\mu$ -opioid–receptor antagonist, for treating opioid-induced constipation in patients with advanced illness. Methylnaltrexone rapidly induced laxation without affecting central analgesia or precipitating withdrawal.

SEE P. 2332; EDITORIAL, P. 2400

## ORIGINAL ARTICLE

### A Placebo-Controlled Trial of Prucalopride for Severe Chronic Constipation

In this 12-week randomized trial, prucalopride, a selective 5-HT<sub>4</sub> receptor agonist, substantially relieved constipation. Because of cardiac adverse events seen with other 5-HT<sub>4</sub> receptor agonists, electrocardiograms were monitored; there was no prolongation of the corrected QT interval. Diarrhea and headache were more common in the prucalopride groups than in the placebo group. This study was not large or long enough to rule out cardiovascular events or other uncommon adverse events.

SEE P. 2344; EDITORIAL, P. 2402

## ORIGINAL ARTICLE

### Genes Implicated in Bone Mineral Density and Fractures

This study implicates five genetic loci in bone mineral density. Two of these loci are new; three implicate genes known to be involved in bone remodeling, such as the receptor activator of nuclear factor- $\kappa$ B ligand gene (*RANKL*). Analyses showed that three of the loci are associated with osteoporotic fracture.

SEE P. 2355; EDITORIAL, P. 2403

## CLINICAL PRACTICE

### Precocious Puberty

The parents of a 6-year-old girl bring her to a pediatrician because of breast development. Her medical history is unremarkable. The parents are of average height, and the mother reports first menstruating when she was 11 years old. On physical examination, the girl is 125 cm tall (in the 97th percentile for her age), weighs 28 kg, and has a body-mass index of 17.9 (90th percentile for her age). Her breast development is classified as Tanner stage 3, and she has Tanner stage 2 pubic hair. Review of her previous growth data indicates that she has grown 8 cm during the past year. How should her condition be evaluated and managed?

SEE P. 2366; CME, P. 2421

## CURRENT CONCEPTS

### The Hepatopulmonary Syndrome

The hepatopulmonary syndrome is characterized by defects in oxygenation due to pulmonary abnormalities associated with chronic liver disease. Dyspnea and hypoxemia can be severe and often worsen in the upright position. Gross dilatation of the precapillary and capillary vessels occurs with ventilation–perfusion mismatch. The syndrome usually improves after liver transplantation.

SEE P. 2378; CME, P. 2422

## CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

### A Man with Metastatic Renal-Cell Carcinoma

A 63-year-old man was admitted to this hospital because of a mass in the left kidney, associated with abdominal pain, weight loss of 3.2 kg, and cough. Physical examination disclosed scrotal varicoceles; imaging studies disclosed a mass in the left kidney, a mass in the left adrenal gland, and multiple pulmonary nodules. A diagnostic procedure was performed, and management decisions were made.

SEE P. 2389; CME, P. 2423

## VIDEOS IN CLINICAL MEDICINE

### Cricothyroidotomy



Cricothyroidotomy is an emergency procedure performed on patients with severe respiratory distress when orotracheal or nasotracheal intubation has failed or is not feasible. This video shows viewers how to perform an emergency cricothyroidotomy in an adult.

SEE P. e25