

# THIS WEEK in the JOURNAL

## ORIGINAL ARTICLE

### Diesel-Exhaust Inhalation in Men with Coronary Disease

After exposure to dilute diesel exhaust, men with coronary disease had increased exercise-induced myocardial ischemia, along with depressed fibrinolytic function. The data reported suggest possible mechanisms for the detrimental effect of air pollution from traffic in patients with coronary disease.

SEE P. 1075; EDITORIAL, P. 1147

## ORIGINAL ARTICLE

### Intensive versus Conventional Treatment in AL Amyloidosis

Myeloablative doses of melphalan with rescue by autologous hematopoietic stem cells are currently used in the treatment of immunoglobulin-light-chain (AL) amyloidosis, but the efficacy of the therapy is unproven. This randomized trial compared a regimen of high-dose melphalan with standard doses of melphalan plus high doses of dexamethasone. The aggressive treatment had no survival advantage as compared with conventional treatment with standard-dose melphalan.

SEE P. 1083

## ORIGINAL ARTICLE

### Idraparinix versus Standard Therapy for Venous Thromboembolic Disease

The long-acting factor X inhibitor idraparinix was compared with a standard antithrombotic regimen in two randomized trials, one for the treatment of deep venous thrombosis (DVT Study) and the other for the treatment of pulmonary embolism (PE Study). In the DVT Study, idraparinix was not inferior to standard therapy. In the PE Study, idraparinix was less efficacious than standard therapy.

SEE P. 1094; CME, P. 1171

## ORIGINAL ARTICLE

### Extended Prophylaxis of Deep Venous Thrombosis or Pulmonary Embolism with Idraparinux

The high risk of recurrent venous thromboembolism in patients with idiopathic venous thrombosis or pulmonary embolism is reason for extended thromboprophylaxis in selected patients. Although 6 months of prophylaxis with idraparinix after the initial 6 months of

treatment with an anticoagulant was effective in preventing recurrent thromboembolism, its use caused an excess of major, clinically significant hemorrhagic episodes.

SEE P. 1105

## CLINICAL THERAPEUTICS

### Low-Tidal-Volume Ventilation in ARDS

A 55-year-old man is hospitalized with severe community-acquired pneumonia, and the acute respiratory distress syndrome (ARDS) develops. The patient requires intubation and mechanical ventilation. An intensive care specialist recommends the use of a low-tidal-volume ventilation strategy, which may reduce the risk of ventilator-induced lung injury and is associated with better survival in patients with ARDS than conventional ventilation.

SEE P. 1113; CME, P. 1169

## MECHANISMS OF DISEASE

### Myocardial Reperfusion Injury

Lethal reperfusion injury is a paradoxical type of myocardial injury caused by the restoration of coronary blood flow after an ischemic episode. This review focuses on the mechanisms of the injury, on attempts to protect the heart against it, and on promising new approaches to cardioprotection during percutaneous coronary intervention.

SEE P. 1121

## CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

### A 68-Year-Old Man with Syncope

A 68-year-old man was admitted to the hospital because of a syncopal episode, followed by hemiparesis and altered mental status. An electrocardiogram revealed ST-segment elevations in the anterolateral leads, and MRI of the brain revealed infarcts involving all vascular distributions. Transthoracic echocardiography showed hypokinesis of the left ventricle and a mobile echodensity in the left atrium. Angiography revealed occlusion of the left anterior descending coronary artery, both renal arteries, and the superior mesenteric artery. A diagnostic procedure was performed.

SEE P. 1137; CME, P. 1170

## CLINICAL IMPLICATIONS OF BASIC RESEARCH

### On Prions, Proteasomes, and Mad Cows

A recent study showed that the toxic prion protein causing "mad cow disease" inhibits proteasome function.

SEE P. 1150