

# THIS WEEK in the JOURNAL

## ORIGINAL ARTICLE

### Myocardial Infarction on a Weekday or Weekend

This study showed that myocardial infarction was associated with a significantly higher mortality rate when patients were admitted on the weekend rather than a weekday. The higher mortality rate was explained, at least in part, by the lower rate of invasive cardiac procedures performed on the weekend. These findings have important implications for hospital planning.

SEE P. 1099; EDITORIAL, P. 1164; CME, P. 1195

## ORIGINAL ARTICLE

### Allografting as Compared with Autografting for Newly Diagnosed Myeloma

This trial of the efficacy of bone marrow transplantation in patients 65 years of age or younger with newly diagnosed myeloma enrolled only patients who had a sibling. All siblings and patients underwent HLA typing. Patients with a qualified HLA-identical sibling underwent an autologous–allogeneic transplantation protocol, whereas patients lacking such a sibling underwent a double autologous transplant. The receipt of an HLA-identical stem-cell transplant from a sibling improved survival as compared with the receipt of two autologous stem-cell transplants.

SEE P. 1110

## ORIGINAL ARTICLE

### Loss of Vaccine-Induced Immunity to Varicella over Time

Active surveillance of a sentinel population of 350,000 persons was performed to determine whether the severity and incidence of breakthrough varicella increased with the time since vaccination. The annual rate of breakthrough disease significantly increased with the time since vaccination, from 1.6 cases per 1000 person-years within 1 year after vaccination to 9.0 at 5 years and 58.2 at 9 years. A second dose of varicella vaccine is now recommended.

SEE P. 1121; CME, P. 1194

## SPECIAL ARTICLE

### Care Patterns in Medicare and Implications for Pay for Performance

Proposed pay-for-performance initiatives in Medicare rely on the use of claims data to identify a physician or a practice with primary responsibility for a patient's care. Using Medicare claims data from 2000 to 2002 to assign patients to the physician or primary care physician with whom they had the most visits, the investigators found that patients typically saw many different physicians and that less than one third of patients' visits each year were with the physician to whom their care would have been assigned. These findings raise doubts about the potential of current pay-for-performance approaches to improve the quality of care.

SEE P. 1130; EDITORIAL, P. 1166

## MECHANISMS OF DISEASE

### The Failing Heart — An Engine Out of Fuel

Abnormalities of cardiac energy metabolism make an important contribution to chronic heart failure. This review summarizes the main events in cardiac energy metabolism, discusses abnormalities in these metabolic processes in heart failure, and looks to future treatments of heart failure that entail correction of the metabolic defects.

SEE P. 1140

## CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

### A 48-Year-Old Man with Chest Pain Followed by Cardiac Arrest

A 48-year-old man was admitted to this hospital because of chest pain. An electrocardiogram revealed diffuse ST-segment elevation, and an echocardiographic study was normal. Cardiac arrest with ventricular tachycardia occurred 13 hours after presentation. The patient was successfully resuscitated, and the result of a diagnostic test was received on the fourth hospital day.

SEE P. 1153; CME, P. 1193

## CLINICAL IMPLICATIONS OF BASIC RESEARCH

### The Expanding and Contracting Human Genome

The human genome has many large expansions and contractions. These affect gene dosage and may affect susceptibility to disease.

SEE P. 1169; PERSPECTIVE, P. 1094