

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Intracoronary Bone Marrow Cells in Acute Myocardial Infarction

To promote the regeneration of myocardial cells after myocardial infarction, intracoronary infusion of bone marrow cells, which contain stem cells and progenitor cells, has been investigated. In this study of patients with acute anterior myocardial infarction, infusion of bone marrow cells had no effect on left ventricular function or infarct size 6 months after the infarction.

SEE P. 1199; EDITORIAL, P. 1274; CME, P. 1295

ORIGINAL ARTICLE

Intracoronary Progenitor Cells in Acute Myocardial Infarction

The infusion of bone marrow–derived progenitor cells into the infarct-related coronary artery after an acute myocardial infarction was associated with an absolute increase in the ejection fraction of 5.5%. Determining whether this modest improvement in ventricular function will translate into a long-term clinical benefit will require larger trials with longer follow-up.

SEE P. 1210; EDITORIAL, P. 1274

ORIGINAL ARTICLE

Transcoronary Transplantation of Progenitor Cells after Myocardial Infarction

Intracoronary infusion of progenitor cells derived from bone marrow in patients with healed myocardial infarction resulted in moderate but significant improvement in global and regional ventricular function. Circulating progenitor cells were less effective. The mechanisms underlying the benefit are uncertain. This line of research is in its early stages but may hold promise for the future.

SEE P. 1222; EDITORIAL, P. 1274

ORIGINAL ARTICLE

Eculizumab in Paroxysmal Nocturnal Hemoglobinuria

In this randomized trial, eculizumab, a humanized monoclonal antibody against C5 that inhibits terminal complement activation, was compared with placebo as a treatment for paroxysmal nocturnal hemoglobinuria. The antibody stabilized hemoglobin levels, decreased the need for transfusions, and improved the quality of life by reducing intravascular hemolysis.

SEE P. 1233

CLINICAL PRACTICE

Acute Vulvovaginitis

A 24-year-old sexually active woman presents with a three-day history of vaginal pruritus and increased vaginal discharge. One year before presentation, she had the same symptoms, which resolved with use of an over-the-counter antifungal agent. She uses oral contraceptives for birth control. The physical examination reveals vulvar erythema and normal-appearing vaginal discharge. How should she be evaluated and treated?

SEE P. 1244; CME, P. 1293

MECHANISMS OF DISEASE

Cancer Stem Cells

This review describes cancer stem cells, a topic of considerable biologic and clinical interest in oncology.

SEE P. 1253; CME, P. 1294

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A Woman with Painful Nodules on the Fingertips, Shortness of Breath, and Fatigue

A 43-year-old woman was hospitalized because of painful nodules on the fingertips, shortness of breath, and fatigue. She had had systemic lupus erythematosus for 12 years, associated with Raynaud's phenomenon. Two weeks before admission, painful nodules developed on the fingers; 1 week later, shortness of breath and fatigue developed. On admission, computed tomography of the chest showed mediastinal and hilar lymphadenopathy and two nodules in the lung. A diagnostic procedure was performed.

SEE P. 1263