THIS WEEK *in the* JOURNAL

ORIGINAL ARTICLE

Stents versus Bypass Grafting for Left Main Coronary Artery Disease

A cohort of patients who underwent stent implantation for unprotected left main coronary artery disease was compared with a propensity-matched cohort of patients who underwent coronary-artery bypass grafting. The risk of death and the composite outcome of death, Q-wave myocardial infarction, or stroke did not differ significantly between the two groups. The risk of target-vessel revascularization was higher in the group that received stents.

SEE P. 1781; EDITORIAL, P. 1851; CME, P. 1879

ORIGINAL ARTICLE

Home AEDs for Sudden Cardiac Arrest

A multicenter trial evaluated patients with previous anterior-wall myocardial infarction who were not candidates for an implantable cardioverter–defibrillator. Patients were randomly assigned either to have an automated external defibrillator (AED) at home for management of cardiac arrest or to receive standard treatment. At a median follow-up of 3 years, there was no significant difference between the two groups in mortality from any cause.

SEE P. 1793; EDITORIAL, P. 1853

BRIEF REPORT

Pyruvate Kinase Deficiency and Malaria

Erythrocytes from patients with pyruvate kinase deficiency are resistant to invasion by *Plasmodium falciparum*. Such erythrocytes that succumb to infection are more rapidly cleared by macrophages than are infected erythrocytes from control subjects. These data suggest that mutations in the gene encoding pyruvate kinase may confer resistance to malaria.

SEE P. 1805; EDITORIAL, P. 1855

BRIEF REPORT

Mutations in the Iodotyrosine Deiodinase Gene and Hypothyroidism

DEHAL1, the gene encoding iodotyrosine deiodinase in the thyroid, allows for the reuse of iodide for thyroid hormone synthesis. The authors identified four patients from three unrelated families with three unique mutations; all had a dramatic reduction of in vitro iodotyrosine deiodinase activity. Patients had severe goitrous hypothyroidism, evident in infancy and childhood. Infants with *DEHAL1* defects may have normal thyroid function at birth and thus may be missed by neonatal screening programs.

SEE P. 1811; EDITORIAL, P. 1856

SPECIAL ARTICLE

Ezetimibe Use in the United States and Canada

Ezetimibe lowers low-density lipoprotein cholesterol, but no studies have documented a clinical benefit from the drug. Nevertheless, this study shows the growing use of ezetimibe in the United States, to a much greater extent than in Canada, where direct-to-consumer advertising of prescription drugs is prohibited.

SEE P. 1819; CME, P. 1878

CLINICAL THERAPEUTICS

Artesunate for Severe Falciparum Malaria

A 35-year-old man presents with a febrile illness after travel in West Africa, and severe malaria is diagnosed. Treatment with artesunate is recommended. Artesunate is a member of a class of antimalarial agents called artemisinins, and it is at least as effective against severe malaria as quinine, with fewer side effects. The drug is available in the United States only by special request from the Centers for Disease Control and Prevention.

SEE P. 1829; CME, P. 1877

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A 46-Year-Old Man with Rheumatoid Arthritis and Lymphadenopathy

A 46-year-old man with rheumatoid arthritis was seen in the hematology–oncology clinic because of anorexia and generalized lymphadenopathy. One month earlier, diffuse lymphadenopathy developed in his neck, axillae, and groin, associated with sore throat and loss of appetite but not with weight loss. Serum protein electrophoresis disclosed a monoclonal spike in the gamma region. A diagnostic procedure was performed.

SEE P. 1838

CLINICAL IMPLICATIONS OF BASIC RESEARCH

Mast Cells and Pancreatic Cancer

Mast cells fuel the growth of islet-cell tumors in a mouse model.

SEE P. 1860