

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Balloon Angioplasty versus Nitinol Stents

Implantation of stainless-steel stents for disease of the superficial femoral artery has been associated with high rates of late clinical failure, and balloon angioplasty is therefore the preferred procedure. In this randomized trial, the use of nitinol stents was associated with lower rates of restenosis and better treadmill exercise performance at 6 months and 12 months than was the use of balloon angioplasty.

SEE P. 1879; EDITORIAL, P. 1944; CME, P. 1974

ORIGINAL ARTICLE

Children with Elevated Bilirubin Levels

The authors assessed neurodevelopmental outcomes in children who had neonatal total bilirubin levels of at least 25 mg per deciliter but generally below 30 mg per deciliter and who were in most cases treated with phototherapy. As compared with a control group, these children were not more likely to have an abnormal neurodevelopmental outcome at a mean age of five years or a documented neurologic diagnosis. These data provide reassurance that elevated bilirubin levels in the range studied are unlikely to result in adverse neurodevelopmental outcomes.

SEE P. 1889; EDITORIAL, P. 1947; CME, P. 1975

ORIGINAL ARTICLE

An Antibody-Deficiency Syndrome Due to Mutations in the *CD19* Gene

Four patients from two unrelated families with increased susceptibility to infection, hypogammaglobulinemia, and normal numbers of B cells in the blood were found to have mutations in the *CD19* gene. *CD19*, a protein on the B-cell surface, forms a complex with other proteins that participates in the activation of B cells by antigens.

SEE P. 1901; PERSPECTIVE, P. 1874

BRIEF REPORT

Inherited and Somatic *CD3 ζ* Mutations in a Patient with T-Cell Deficiency

A child with greatly increased susceptibility to viral, bacterial, and fungal infections was found to have inherited an autosomal recessive mutation of the *CD3 ζ* gene. *CD3 ζ* , a component of the T-cell receptor-*CD3* complex, is essential for the differentiation and activation of T cells.

SEE P. 1913; PERSPECTIVE, P. 1874

SPECIAL ARTICLE

The Family Business — To Educate

In the 115th annual Shattuck Lecture, Dr. Ronald Arky, the 2005 speaker, considers the history and science of medical education, discusses its current disjointed state, and calls for a restructuring of continuing medical education.

SEE P. 1922

CLINICAL PRACTICE

Thrombotic Thrombocytopenic Purpura

A 40-year-old obese black woman has had weakness and epigastric pain for several weeks and diarrhea and vomiting for four days. She does not appear acutely ill; the physical examination is normal except for abdominal tenderness. Her hematocrit is 25 percent. The platelet count is 10,000 per cubic millimeter. The peripheral-blood smear shows occasional fragmented and polychromatophilic red cells. The serum creatinine level is 1.1 mg per deciliter (97.2 μ mol per liter), bilirubin 2.5 mg per deciliter (42.8 μ mol per liter), and lactate dehydrogenase 722 U per liter (normal, <250). How should this case be managed?

SEE P. 1927; CME, P. 1973

CLINICAL PROBLEM-SOLVING

Ring around the Diagnosis

A 71-year-old retired schoolteacher from rural Ohio presented to his local hospital with a two-week history of malaise, fever, anorexia, chills, and sweats. He had not had a cough or symptoms involving the upper respiratory, gastrointestinal, or urinary tract.

SEE P. 1937