

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Decreasing Catheter-Related Bloodstream Infections in the ICU

Catheter-related bloodstream infections are associated with significant morbidity. In Michigan, a statewide initiative to reduce catheter-related bloodstream infections in intensive care units (ICUs) was implemented. This simple intervention included washing hands, using full-barrier precautions with central-line placement, cleaning the skin with chlorhexidine, avoiding the femoral site if possible, and removing unnecessary catheters. The median rate of infection per 1000 catheter-days decreased from 2.7 at baseline to 0 throughout all periods after implementation of the study intervention.

SEE P. 2725; EDITORIAL, P. 2781; CME, P. 2802

ORIGINAL ARTICLE

Lapatinib plus Capecitabine for HER2-Positive Advanced Breast Cancer

Trastuzumab, a humanized monoclonal antibody against the extracellular portion of human epidermal growth factor receptor type 2 (HER2), is effective in HER2-positive breast cancer. This randomized trial shows that lapatinib, an orally active inhibitor of HER2, combined with capecitabine is superior to capecitabine alone in women with advanced HER2-positive breast cancer who have had a relapse after receiving trastuzumab. These results should provide the impetus for trials of lapatinib as an initial treatment in HER2-positive breast cancer.

SEE P. 2733; EDITORIAL, P. 2783; CME, P. 2803

ORIGINAL ARTICLE

Genetic Analysis of Congenital Long-QT Syndrome

The autosomal dominant forms of the long-QT syndrome, caused by mutations in potassium-channel genes, result in ventricular arrhythmias and sudden death. This genetic analysis shows that the mutations are transmitted to offspring more frequently than would be predicted by mendelian genetics. Furthermore, there is a female predominance, owing to more frequent transmission of the mutations from mothers to their daughters than to their sons.

SEE P. 2744

BRIEF REPORT

Trypanosoma evansi Infection in Humans

The first case of *Trypanosoma evansi* infection in a human was recently identified in India. This report shows that infection was due to a host rather than a parasite factor. Specifically, the serum of the patient was devoid of trypanolytic activity because of frameshift mutations in both *apolipoprotein L-1* alleles.

SEE P. 2752

BRIEF REPORT

Deficiency of Cartilage-Associated Protein in Recessive Lethal Osteogenesis Imperfecta

Mutations in type I collagen cause classic osteogenesis imperfecta, an autosomal dominant disease; however, a recessive form has long been suspected. The authors showed that deficiency in the cartilage-associated protein, required for the post-translational prolyl 3-hydroxylation of collagen, was associated with autosomal recessive osteogenesis imperfecta in three infants who did not have a primary collagen defect. These data suggest that prolyl 3-hydroxylation of type I collagen is important for bone formation.

SEE P. 2757

CLINICAL PRACTICE

Monoclonal Gammopathy of Undetermined Significance

A 58-year-old man with no significant medical history is found to have an elevated total protein concentration (8.1 g per deciliter) on a routine blood chemical study. He is asymptomatic, and his physical examination is normal. Serum protein electrophoresis reveals a monoclonal spike of 2.1 g per deciliter at the gamma region; immunofixation shows a monoclonal IgG kappa protein. What further evaluation is warranted, and assuming the diagnosis of monoclonal gammopathy of undetermined significance is made, how should the patient be followed?

SEE P. 2765; CME, P. 2801

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A 64-Year-Old Man with Anemia and a Low Level of HDL Cholesterol

A 64-year-old man with a 3-year history of anemia was found to have a low serum level of high-density lipoprotein (HDL) on routine testing, with a cardiac risk ratio of 9.8. The level of HDL cholesterol had been normal 3 years earlier. A diagnostic procedure was performed.

SEE P. 2772