

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Diagnosis of Ventilator-Associated Pneumonia

Ventilator-associated pneumonia is an important cause of nosocomial complications. This large, multicenter study compared the usefulness in guiding therapy of two diagnostic approaches for ventilator-associated pneumonia: bronchoalveolar lavage with quantitative culture and endotracheal aspiration with nonquantitative culture. Clinical outcomes such as the 28-day mortality rate and overall use of antimicrobial agents were similar with the two strategies.

SEE P. 2619; EDITORIAL, P. 2691; CME, P. 2715

ORIGINAL ARTICLE

Biomarkers for the Prediction of Cardiovascular Events and Death

In an analysis from the Framingham Heart Study, 10 biomarkers were evaluated for their ability to predict clinical outcomes. The addition of biomarkers to conventional risk factors resulted in significant increases in the hazard ratios for death and major cardiovascular events but only small increases in the C statistic for each end point. The incremental value of the assessment of biomarkers to the evaluation of established risk factors appears to be modest.

SEE P. 2631; PERSPECTIVE, P. 2615

ORIGINAL ARTICLE

Ertapenem versus Cefotetan Prophylaxis in Elective Colorectal Surgery

With the availability of cefotetan and ceftioxin possibly ending, effective agents for wound prophylaxis during elective colorectal surgery are needed. In this large randomized, multicenter, double-blind study, ertapenem was found to be superior to cefotetan in the prevention of surgical-site infection but was associated with an increase in *Clostridium difficile* infection.

SEE P. 2640; EDITORIAL, P. 2693

ORIGINAL ARTICLE

PET to Detect Cerebral Amyloid and Tau in Mild Cognitive Impairment

A small molecule (FDDNP) that binds amyloid senile plaques and tau neurofibrillary tangles (the neuropathological findings in Alzheimer's disease) was injected into subjects before PET scanning. FDDNP binding

was highest in subjects with Alzheimer's disease, intermediate in those with mild cognitive impairment, and lowest in normal controls. Whether there will be clinical applications for this noninvasive method of detecting cerebral plaques and tangles is not known.

SEE P. 2652

MEDICAL EDUCATION

Teaching Surgical Skills — Changes in the Wind

Traditionally, surgeons have been trained and evaluated on the basis of their performance of surgical procedures in live patients. This article in the Medical Education series explores the use of mechanical devices for the teaching and evaluation of surgical skills.

SEE P. 2664; EDITORIAL, P. 2695; CME, P. 2714

CURRENT CONCEPTS

Autoimmune Pancreatitis

Autoimmune pancreatitis is a form of chronic pancreatitis characterized by an autoimmune inflammatory process that may involve the biliary ducts, bowel, regional lymph nodes, and sometimes the lung and kidney. Patients with this uncommon form of pancreatitis may present with an obstructing pancreatic mass that mimics pancreatic cancer but responds to corticosteroid treatment. This review summarizes how the diagnosis of autoimmune pancreatitis can be established on the basis of imaging, histologic, and serologic criteria.

SEE P. 2670; CME, P. 2713

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A 24-Year-Old Woman with Systemic Lupus Erythematosus, Seizures, and Right Arm Weakness

A woman was transferred to this hospital because of seizures and a lesion in the brain. The patient had a history of systemic lupus erythematosus, for which she had received corticosteroids and other immunosuppressive medications. Despite negative biopsy specimens and cultures, broad-spectrum antimicrobial therapy, and escalating doses of corticosteroids, fever persisted, neurologic function worsened, and the patient died on the 54th hospital day. An autopsy was performed.

SEE P. 2678

CLINICAL IMPLICATIONS OF BASIC RESEARCH

Protein Turnover and Alzheimer's Disease

A molecule that regulates protein degradation affects memory loss in a mouse model of Alzheimer's disease.

SEE P. 2697