

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Pulmonary-Artery vs. Central Venous Catheter to Guide Therapy for Lung Injury

Hemodynamic monitoring is a common physiological intervention in patients with acute lung injury. In this randomized, controlled trial in which patient care was dictated by a specific hemodynamic protocol, there was no significant difference in 60-day mortality whether monitoring was performed with a pulmonary-artery catheter or a central venous catheter.

SEE P. 2213; EDITORIAL, P. 2273

ORIGINAL ARTICLE

Peritoneal Drainage vs. Laparotomy for Necrotizing Enterocolitis in Neonates

In this multicenter, randomized trial comparing primary peritoneal drainage with laparotomy for the management of perforated necrotizing enterocolitis in preterm infants with birth weights less than 1500 g, there were no significant differences between groups in mortality at 90 days, dependence on total parenteral nutrition at 90 days, or length of the hospital stay in surviving infants. These data do not support an advantage of either primary peritoneal drainage or laparotomy over the alternative approach among preterm infants with perforated necrotizing enterocolitis.

SEE P. 2225; EDITORIAL, P. 2275; CME, P. 2306

ORIGINAL ARTICLE

Transmission of LCMV Infection by Organ Transplantation

This report documents two clusters of lymphocytic choriomeningitis virus (LCMV) infection transmitted through solid-organ transplantation. Seven of the eight recipients died; one recipient, who received ribavirin and reduced levels of immunosuppression, survived. The signs of infection in the recipients included thrombocytopenia, coagulopathy, graft dysfunction, and either fever or leukocytosis.

SEE P. 2235; PERSPECTIVE, P. 2208

MECHANISMS OF DISEASE

Bone Quality — The Material and Structural Basis of Bone Strength and Fragility

This review discusses advances in knowledge regarding the composition and structure of bone, the modeling and remodeling of bone, the formation of bone

during growth and its reconstruction in adults, and how age-related abnormalities in these processes compromise the composition and structure of bone.

SEE P. 2250; CME, P. 2307

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A Sudden Change in Mental Status Leading to Admission to an Emergency Department

A 72-year-old woman had a sudden onset of slurred speech and left hemiparesis. Emergency medical services were called, and she was airlifted to a hospital. A multidisciplinary team of physicians discuss the emergency management of acute stroke.

SEE P. 2263; CME, P. 2305

LEGAL ISSUES IN MEDICINE

Intelligent Judging — Evolution in the Classroom and the Courtroom

Annas discusses the December 2005 U.S. District Court decision about a curricular change requiring the teaching of intelligent design in public schools in Dover, Pennsylvania. The judge ruled that intelligent design is not science and that the school board's curricular change served a religious purpose, in violation of the establishment clause of the First Amendment.

SEE P. 2277

CLINICAL IMPLICATIONS OF BASIC RESEARCH

A New Immune Cell and the Response to Imatinib Mesylate

Gastrointestinal stromal tumors have been shown to respond to imatinib mesylate in a manner dependent on immune-cell function. A new type of immune cell that shares characteristics with both natural killer cells and dendritic cells seems to mediate this response.

SEE P. 2282

VIDEOS IN CLINICAL MEDICINE

Male Urethral Catheterization

Urethral catheterization may be indicated for diagnostic or therapeutic purposes: to decompress the bladder in patients with urinary retention, to permit irrigation to remove blood and clots from the urinary bladder, to obtain sterile urine for diagnostic purposes, to measure urinary output in critically ill patients or during surgical procedures, or to measure the residual urinary volume after voiding. This procedural video demonstrates how to perform male urethral catheterization.

SEE P. e22

