

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Lung Recruitment in ARDS

The acute respiratory distress syndrome (ARDS) is characterized in part by diffuse infiltrates on chest radiographs. These investigators analyzed CT scans of the lung in patients with ARDS to ascertain the fraction of lung that was not aerated and the fraction of lung that could be recruited into an aerated state. Patients with higher percentages of potentially recruitable lung had poorer outcomes than those with lower percentages.

SEE P. 1775; EDITORIAL, P. 1839

ORIGINAL ARTICLE

Helicobacter pylori Infection and Thyroxine Dose in Multinodular Goiter

This study, designed to determine whether impaired gastric acid secretion leads to an increased need for thyroxine in patients with euthyroid multinodular goiter, shows that the daily requirement of thyroxine was 22 to 34 percent higher in patients with *H. pylori*-related gastritis, atrophic gastritis, or both than in patients in the reference group. These data suggest that normal gastric acid secretion is necessary for effective absorption of oral thyroxine.

SEE P. 1787; CME, P. 1867

ORIGINAL ARTICLE

Vitamins C and E and the Risks of Preeclampsia and Perinatal Complications

In this multicenter, randomized trial, supplementation with vitamins C and E during pregnancy did not reduce the risks of preeclampsia in nulliparous women, intrauterine growth restriction, or a composite end point of death or other serious outcomes in the infants. These data, therefore, fail to support the idea that such supplementation is beneficial.

SEE P. 1796; EDITORIAL, P. 1841

BRIEF REPORT

Variant of Hepatitis B Virus with Primary Resistance to Adefovir

Adefovir is an effective treatment for chronic infection with the hepatitis B virus (HBV), and studies suggest that resistance develops less often during treatment with adefovir than with lamivudine. This report docu-

ments primary resistance to adefovir in three patients. Each patient had a rare variant of HBV with a mutation in the reverse-transcriptase domain (rtI233V). Naturally occurring HBV variants may explain the failure to respond to adefovir in some cases.

SEE P. 1807

MEDICAL PROGRESS

Hematopoietic Stem-Cell Transplantation

Hematopoietic stem-cell transplantation, which is used to treat both malignant and nonmalignant conditions, was first conceived more than 50 years ago, but problems associated with transplanting a nonsolid organ and modulating the immune response had to be solved before the procedure could be used clinically. This review summarizes background information about hematopoietic stem-cell transplantation and discusses the current role of the procedure.

SEE P. 1813; CME, P. 1865

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A Man with a Painful Bone Mass and Lesions in the Liver

A 50-year-old man was referred because of a painful lytic bone lesion of the right ulna and multiple hepatic masses that had been identified on computed tomography. Biopsy of the bone lesion disclosed adenocarcinoma. Fanconi's anemia had been diagnosed 10 years earlier, and squamous-cell carcinoma of the esophagus 4 years earlier. A diagnostic procedure was performed.

SEE P. 1828; CME, P. 1866

CLINICAL IMPLICATIONS OF BASIC RESEARCH

Stem Cells — From Marrow to Muscle

Stem cells from bone marrow are induced to differentiate into muscle cells. The differentiated cells contribute to muscle regeneration in rodents.

SEE P. 1844

VIDEOS IN CLINICAL MEDICINE

Procedure Video: Nasogastric Intubation

This video demonstrates nasogastric tube insertion and considers indications, contraindications, and potential complications. A concise online printed summary is also available.

SEE P. e16

