

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

In Vitro Fertilization with Preimplantation Genetic Screening

It has been suggested that the use of preimplantation genetic screening of cleavage-stage embryos for aneuploidies may improve pregnancy rates in women of advanced maternal age undergoing in vitro fertilization (IVF). In this multicenter, double-blind, randomized trial, women 35 through 41 years of age assigned to preimplantation genetic screening had lower rates of ongoing pregnancies and live births than those undergoing IVF alone. These results argue against the routine use of preimplantation genetic screening as an adjunct to IVF in women of advanced maternal age.

SEE P. 9; EDITORIAL, P. 61; CME, P. 103

ORIGINAL ARTICLE

Effect of Aircraft Altitude on Passenger Discomfort

Long flights are associated with passenger discomfort. This study, conducted in an altitude chamber equipped to resemble a commercial-aircraft cabin, examined symptoms and oxygen saturation during a 20-hour simulated flight. The frequency of reported discomfort increased with increasing altitude; there was also a drop in arterial oxygen saturation of 4.4 percentage points at a simulated altitude of 8000 ft. There was less discomfort at simulated altitudes of 6000 ft or less.

SEE P. 18

ORIGINAL ARTICLE

Rosiglitazone Evaluated for Cardiovascular Outcomes

Meta-analyses suggest that the thiazolidinedione rosiglitazone, used in the treatment of type 2 diabetes, may increase the risk of myocardial infarction and death from cardiovascular causes. This interim analysis of an ongoing noninferiority trial of rosiglitazone is inconclusive but does not exclude cardiotoxicity. Because patients with diabetes are already at high risk for cardiovascular disease, it is important that any potential cardiotoxicity of rosiglitazone be reported.

SEE P. 28; EDITORIALS, PP. 63, 64, AND 67

DRUG THERAPY

Trastuzumab in Clinical Practice

Overexpression of human epidermal growth factor receptor type 2 (HER2) in breast cancer is associated with decreased overall survival. Trastuzumab, a humanized monoclonal antibody that targets HER2, is approved by the Food and Drug Administration for patients with invasive breast cancers that overexpress HER2. This review considers the mechanism of action and the use of this agent.

SEE P. 39; CME, P. 101

CLINICAL PROBLEM-SOLVING

A Sinister Development

A 35-year-old woman presented to the emergency department with a 2-day history of progressive swelling and pain in her left leg, without antecedent trauma. Her pain worsened acutely during the morning before her arrival. She felt warm but reported no fever or chills. She also reported mild dyspnea during the previous day, with no associated chest discomfort or significant immobility.

SEE P. 53; CME, P. 102

HEALTH POLICY REPORT

Insuring All Children — The New Political Imperative

Congress has increased its efforts to develop strategies to make health insurance more affordable and accessible. Both political parties agree that their initial efforts should focus on children. This report reviews the history of the State Children's Health Insurance Program and looks at Congressional proposals to expand it to reduce the number of children without health insurance.

SEE P. 70

CLINICAL IMPLICATIONS OF BASIC RESEARCH

Resistance of Acute Lymphoblastic Leukemia to Therapy

The resistance of leukemic blast cells to asparaginase may depend on their biochemical niche in the bone marrow.

SEE P. 77