

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

Inhaled Nitric Oxide for Critically Ill Preterm Infants

Premature infants with severe respiratory failure may be treated with inhaled nitric oxide, a controversial treatment that may reduce mortality or prevent bronchopulmonary dysplasia. In a randomized, placebo-controlled trial in neonates with respiratory failure after treatment with surfactant there was no difference in the rates of death or bronchopulmonary dysplasia.

This multicenter trial could not confirm the benefits of inhaled nitric oxide that were found in a smaller trial.

SEE P. 13; EDITORIAL, P. 82; CME, P. 110

ORIGINAL ARTICLE

Neurodevelopmental Outcomes among Premature Infants Given Inhaled Nitric Oxide

The authors previously reported the results of a single-center, randomized trial of inhaled nitric oxide in premature infants, showing reduced risks of death or chronic lung disease and of severe intraventricular hemorrhage or periventricular leukomalacia. Long-term follow-up revealed that children given nitric oxide had improved neurodevelopmental outcomes at two years of age.

The findings from this single-center trial of premature infants suggest benefits of inhaled nitric oxide on neurodevelopmental outcomes that warrant further study.

SEE P. 23; EDITORIAL, P. 82

ORIGINAL ARTICLE

Hydroxyurea Compared with Anagrelide in High-Risk Essential Thrombocythemia

The major risks in essential thrombocythemia are thrombosis and hemorrhage. In this large, randomized trial, the patients given anagrelide plus aspirin had higher rates of arterial thrombosis and serious hemorrhage, whereas the hydroxyurea group had a higher rate of venous thromboembolism. The rate of transformation to myelofibrosis was higher in the anagrelide group.

These results offer practical guidance for the treatment of patients with essential thrombocythemia and a high risk of thrombosis.

SEE P. 33; EDITORIAL, P. 85; CME, P. 111

ORIGINAL ARTICLE

Oxidized Phospholipids, Lp(a) Lipoprotein, and Coronary Artery Disease

Lp(a) lipoprotein is believed to be involved in the pathogenesis of coronary artery disease. This study provides evidence that its atherogenicity is related to proinflammatory oxidized phospholipids that are bound to it.

SEE P. 46; PERSPECTIVE, P. 9

BRIEF REPORT

Ovarian Transplantation between Monozygotic Twins

This report describes the successful transplantation of ovarian tissue from a fertile monozygotic twin to her 24-year-old twin sister, who had a 10-year history of ovarian failure. The recipient subsequently conceived and gave birth to a girl at 38 weeks' gestation.

SEE P. 58

CURRENT CONCEPTS

Preserving a Woman's Fertility

An increasing number of options are available for women who wish to preserve their fertility, particularly before cancer treatment: oophorectomy with cryopreservation, embryo cryopreservation, and aspiration of oocytes for cryopreservation immediately or after ovarian hyperstimulation. This article also describes the natural process of oocyte loss and methods of testing for decreased ovarian reserve.

SEE P. 64; CME, P. 109

CLINICAL PROBLEM-SOLVING

Double Jeopardy

A 36-year-old woman in her 34th week of pregnancy presented to the emergency department after the sudden onset of severe substernal chest pain that had awoken her in the early morning. She had diaphoresis and nausea but no dyspnea, dizziness, syncope, hemoptysis, cough, or fever.

SEE P. 75

CLINICAL IMPLICATIONS OF BASIC RESEARCH

Progress in Human Somatic-Cell Nuclear Transfer

The efficiency of deriving blastocysts through the nuclear transfer of embryonic stem cells has been improved by a factor of more than 14.

SEE P. 87