



# This Week in the Journal

MAY 12, 2005

**CORRESPONDENCE**

- 2022 Implantable Cardioverter-Defibrillators
- 2025 NT-Pro-BNP and Coronary Heart Disease
- 2026 Expedited Treatment of Sex Partners
- 2027 AT<sub>1</sub>-Receptor Antibodies in Renal-Allograft Rejection
- 2029 Bites of the Brown Recluse Spider
- 2030 Antibody Response to Aerosolized Transgenic Human Alpha<sub>1</sub>-Antitrypsin

**BOOK REVIEWS**

- 2032 Inborn Errors of Development: The Molecular Basis of Clinical Disorders of Morphogenesis
- 2033 Paediatric and Adolescent Gynaecology: A Multi-disciplinary Approach
- 2033 Textbook of Pediatric Gastroenterology and Nutrition

**CONTINUING MEDICAL EDUCATION**

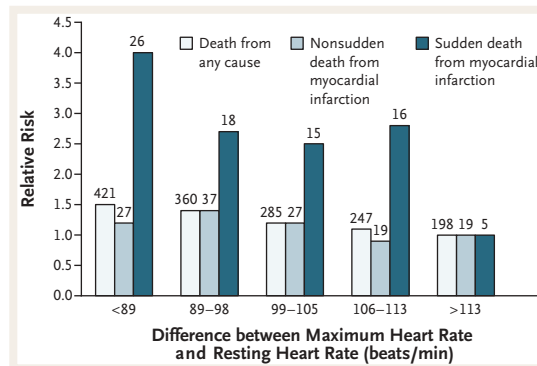
- 2037 Heart-Rate Profile during Exercise as a Predictor of Sudden Death
- 2038 Radical Prostatectomy versus Watchful Waiting in Early Prostate Cancer
- 2039 Cystic Fibrosis

**PHYSICIAN-JOURNALIST**

The *Journal* is seeking a physician with substantial reporting experience to write occasional articles on timely topics in medicine and society for the Perspective section. Send curriculum vitae and writing samples to Perspective Editor, *New England Journal of Medicine*, 10 Shattuck St., Boston, MA 02115, or at [writer@nejm.org](mailto:writer@nejm.org).

**ORIGINAL ARTICLE**

**Exercise-Induced Changes in Heart Rate and Sudden Death**



In asymptomatic French men, the heart-rate profile during exercise testing was found to be predictive of the subsequent risk of sudden death. Specifically, a higher resting heart rate, a lower increase in the heart rate during exercise, and a slower decline in heart rate dur-

ing recovery from exercise were associated with an increased risk of sudden death. The authors speculate that the heart-rate profile of high-risk patients may be due to an underlying autonomic imbalance.

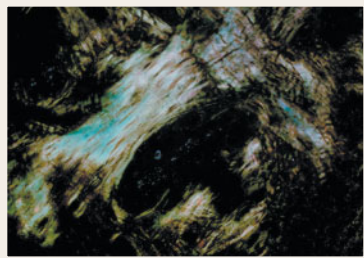
SEE P. 1951; CME, P. 2037

## ORIGINAL ARTICLE

**Circulating Osteoblast-Lineage Cells**

Circulating osteoblast-lineage cells have been considered rare. This study used new methods to show that osteoblastic cells are present in large numbers in peripheral blood in adult men. Furthermore, the concentration of cells increases markedly in adolescent boys during pubertal growth and in adult men after fractures. Thus, osteoblast-lineage cells circulate in physiologically significant numbers, possibly representing a previously unrecognized circulatory component of the process of bone formation.

SEE P. 1959; EDITORIAL, P. 2014

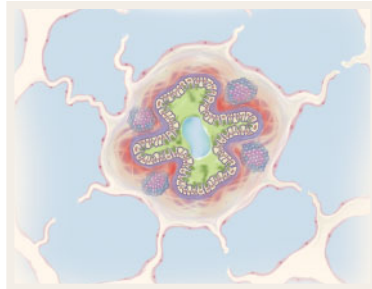


## ORIGINAL ARTICLE

**Decreased Histone Deacetylase Activity in COPD**

The balance between histone deacetylase activity and histone acetyltransferase activity is one of the mechanisms controlling and limiting inflammatory cell activity. These investigators show that patients with chronic obstructive pulmonary disease (COPD), as compared with normal subjects and patients with asthma, cystic fibrosis, or pneumonia, had reductions in histone deacetylase activity. Greater reductions were observed in patients with more severe disease.

SEE P. 1967; EDITORIAL, P. 2016



## ORIGINAL ARTICLE

**Radical Prostatectomy versus Watchful Waiting in Early Prostate Cancer**

Men with early prostate cancer were randomly assigned to undergo radical prostatectomy or watchful waiting. Ten-year estimates of the risks of death from prostate cancer, of distant metastasis, and of local progression all favored radical prostatectomy over watchful waiting for men younger than 65 years.

Prostate cancer was discovered not by screening for prostate-specific antigen (PSA) but by digital rectal examination or after transurethral resection. Nevertheless, this study indicates that radical prostatectomy in men 65 years of age or older is no better than watchful waiting without serial PSA measurements.

SEE P. 1977; CME, P. 2038

## BRIEF REPORT

**Folate Receptor Autoantibodies and Cerebral Folate Deficiency Syndrome**

Childhood cerebral folate deficiency is a disabling neurologic disorder in which folate is reduced in the cerebrospinal fluid but not in the blood. The usual signs of folate deficiency are therefore absent. This study showed that children with cerebral folate deficiency produce autoantibodies that block the binding of folate to the folate receptor. Very high doses of folate resulted in clinical improvement in some children.

Autoantibodies against the folate receptor were previously implicated in cases of neural-tube defects. This report widens the scope of knowledge about receptor-binding autoantibodies and introduces provocative ideas about certain brain disorders of childhood.

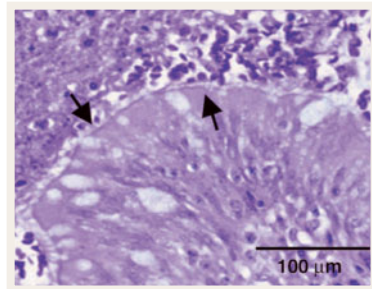
SEE P. 1985; PERSPECTIVE, P. 1948

## MECHANISMS OF DISEASE

**Cystic Fibrosis**

This review of the genetics and molecular mechanisms of cystic fibrosis emphasizes recent progress and recounts the historical background that made these new advances possible.

SEE P. 1992; CME, P. 2039



## CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

**A Man with Fever and Blurred Vision**

A 38-year-old man with a history of ulcerative colitis had fever, arthralgias, leg pain, purpuric skin lesions, and blurred vision within two weeks after excision of a pilonidal cyst followed by treatment with antibiotics. Examination disclosed palpable purpura of the lower leg and retinal hemorrhages and exudates. During his hospitalization, abdominal and testicular pain and hematochezia developed. Diagnostic procedures were performed.

SEE P. 2003

## CLINICAL IMPLICATIONS OF BASIC RESEARCH

**Matrix Metalloproteases and Tumor Invasion**

A new study shows that a matrix metalloprotease cleaves the protease-activated receptor 1, thereby stimulating the migration and invasion of cancer cells.

SEE P. 2020