

This Week in the Journal

MARCH 27, 2003

VOL. 348 NO. 13

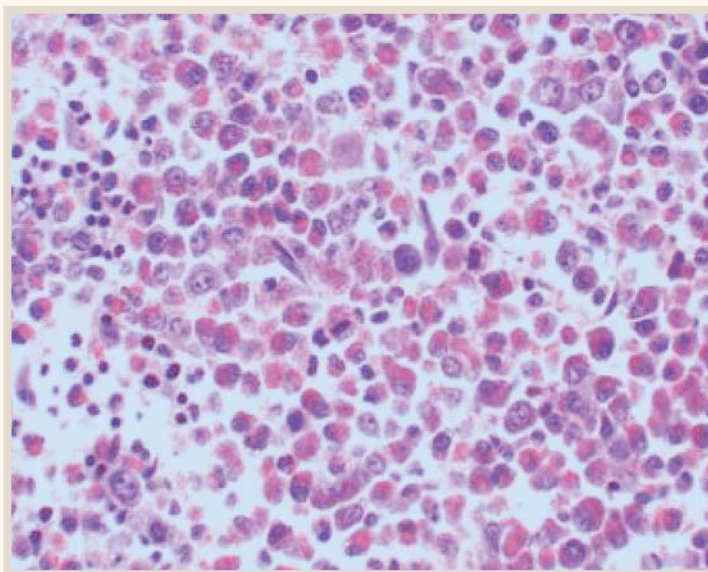
ORIGINAL ARTICLE

Novel Fusion Protein as a Target of Imatinib in the Hypereosinophilic Syndrome

A fusion between the *PDGFRA* and *FIP1L1* genes was found in some cases of the hypereosinophilic syndrome, a fatal disorder in which eosinophils invade and destroy various organs. The fusion protein is a constitutively active tyrosine kinase, which explains the effect of imatinib, an inhibitor of tyrosine kinases, in the disease. The immortalization of hematopoietic cells by the fusion protein indicates its role in causing the syndrome.

A novel fusion of two genes, a novel mechanism of the fusion, and a novel gene product are at the heart of this report. Although the hypereosinophilic syndrome is rare, these findings have implications for finding molecular defects in other cancers.

SEE PAGE 1201; PERSPECTIVE, PAGE 1199



ORIGINAL ARTICLE

Silent Brain Infarcts and the Risk of Cognitive Decline

Silent brain infarcts (i.e., infarcts without associated neurologic symptoms) are common, and their clinical significance is unclear. In this population-based study, elderly people without dementia underwent cognitive testing and magnetic resonance imaging in 1995 to 1996 and again in 1999 to 2000. Dementia was more than twice as likely to develop in participants who had silent brain infarcts at base line.

The incidental finding of an infarct on brain imaging is clinically relevant; silent infarcts are associated with an increased risk of cognitive decline.

SEE PAGE 1215; EDITORIAL, PAGE 1277

ORIGINAL ARTICLE

Oral Opioid Therapy for Neuropathic Pain

Pain occurring after central nervous system or peripheral-nerve injury is known as neuropathic pain and is notoriously difficult to treat. Many physicians have avoided the use of opiates to treat this type of pain for fear of addiction or loss of efficacy due to tolerance. In this eight-week study, patients with neuropathic pain who were treated with high-strength levorphanol tablets had less intense pain than patients assigned to low-strength tablets but had more side effects.

High-strength levorphanol was successful in reducing neuropathic pain, but there was substantial residual untreated pain. Better overall approaches to neuropathic pain are needed.

SEE PAGE 1223; EDITORIAL, PAGE 1279

THIS WEEK IN THE JOURNAL

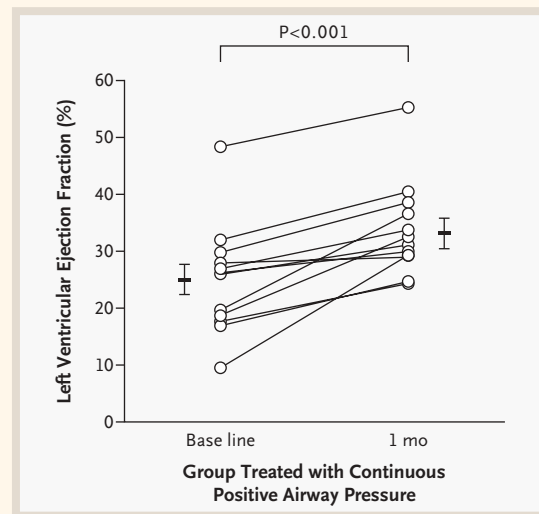
ORIGINAL ARTICLE

**Obstructive Sleep Apnea
in Heart Failure**

Obstructive sleep apnea may exacerbate the manifestations of heart failure, because it causes hypoxia and activation of the sympathetic nervous system, leading to increases in the heart rate and blood pressure. In this study, continuous positive airway pressure was found to reduce systolic blood pressure and increase left ventricular function in patients with heart failure and obstructive sleep apnea.

Since obstructive sleep apnea may occur in up to one third of those with heart failure, continuous positive airway pressure may be beneficial in a substantial proportion of such patients.

SEE PAGE 1233



CLINICAL PRACTICE

Painful Sensory Neuropathy

A 67-year-old woman who had been in excellent health noticed the onset of burning pain in the left great toe two years before evaluation. The pain subsequently extended to involve both feet, from the toes to the heels, and was associated with numbness, tingling, and burning. The discomfort has become severe, is present throughout the day, and disrupts sleep. A physical examination reveals normal muscle strength, muscle-stretch reflexes, proprioception, and vibratory sensation; only pinprick sensation in the toes and feet is diminished. How should this patient be evaluated and treated?

SEE PAGE 1243

MEDICAL PROGRESS

**How Contagious Are Common
Respiratory Tract Infections?**

The answer to this frequently asked question is addressed in this review article, which focuses on common respiratory tract infections that are spread from person to person. The author concentrates on community-based contagion rather than nosocomial infections or agents that have received recent attention principally because of their actual or potential role in biologic terrorism.

SEE PAGE 1256

CORRESPONDENCE

- | | | | |
|------|---|------|---|
| 1284 | Atrial Fibrillation — Rate versus Rhythm Control | 1292 | Treatment of Latent Tuberculosis Infection |
| 1287 | Treatment of Invasive Candidiasis | 1294 | Postpartum Depression |
| 1288 | Physician Specialty and Mortality after Myocardial Infarction | 1294 | A Clinical-Skills Examination for Medical Students? |
| 1289 | Latent Tuberculosis Infection in Immigrants | | |