THIS WEEK *in the* JOURNAL

ORIGINAL ARTICLE

Natalizumab for Relapsing Multiple Sclerosis

This placebo-controlled, randomized trial of patients with relapsing multiple sclerosis demonstrated benefits of natalizumab (an α_4 integrin antagonist) in all the primary and secondary outcome measures. After two years, the probability of sustained progression of disability was 17 percent with natalizumab and 29 percent with placebo. Fatigue and allergic reaction were more common among patients receiving natalizumab.

SEE P. 899; EDITORIAL, P. 965; CME, P. 991

ORIGINAL ARTICLE

Natalizumab in Combination with Interferon for Relapsing Multiple Sclerosis

In this randomized trial involving patients with relapsing multiple sclerosis who had had relapses despite treatment with interferon, natalizumab in combination with interferon was more effective than interferon alone. After two years, the probability of sustained disability progression was 23 percent with combination treatment and 29 percent with interferon alone. Progressive multifocal leukoencephalopathy developed in two patients receiving combination treatment, and one of these two patients died of this serious complication of therapy.

SEE P. 911; EDITORIAL, P. 965

ORIGINAL ARTICLE

Evaluation of Patients Treated with Natalizumab for PML

Progressive multifocal leukoencephalopathy (PML) has been reported in three patients who were treated with natalizumab. In this systematic evaluation for PML in patients who received natalizumab in clinical trials, no additional cases were identified. The authors estimated the risk of PML in the population studied to be about 1 in 1000 patients treated for 18 months. The risk of PML after longer treatment with natalizumab is not known.

SEE P. 924; EDITORIAL, P. 965

ORIGINAL ARTICLE

Catheter Ablation for Chronic Atrial Fibrillation

Catheter ablation encircling the pulmonary veins where they enter the left atrium was evaluated in patients with chronic atrial fibrillation. The procedure maintained sinus rhythm for one year in three quarters of the patients. Both symptoms and the diameter of the left atrium decreased. Catheter ablation is a viable option in patients with symptomatic, chronic atrial fibrillation.

SEE P. 934; EDITORIAL, P. 967

MEDICAL PROGRESS

Multiple Sclerosis — The Plaque and Its Pathogenesis

Substantial advances have elucidated some of the central mechanisms underlying the inflammation, demyelination, and neurodegeneration that occur in multiple sclerosis. Correspondingly, the clinical strategies available for the management of the disease have widened. This review focuses on the current knowledge of the pathogenesis of the inflammatory and neurodegenerative elements of the multiple sclerosis plaque.

SEE P. 942; CME, P. 990

CLINICAL PROBLEM-SOLVING

Search for the Complication

A 58-year-old woman was hospitalized for evaluation of prolonged fever and hemoptysis. She reported having had intermittent fevers, a productive cough, shortness of breath, and hemoptysis during the previous eight months, which had been evaluated at another hospital. Computed tomography of the chest revealed peripheral infiltrates in the upper lobe of the left lung and lingula and a calcified left hilar opacity, with additional, small mediastinal lymph nodes.

SEE P. 957; CME, P. 989

CLINICAL IMPLICATIONS OF BASIC RESEARCH

Silencing Herpes Simplex Virus 2

Vaginal application of small interfering RNA fragments specific to a gene for herpes simplex virus 2 prevented infection in mice.

SEE P. 970