

THIS WEEK in the JOURNAL

ORIGINAL ARTICLE

An Epidemic Strain of *Clostridium difficile*

There have been increases in both the rate and the severity of *C. difficile*-associated disease. This report details the emergence of an epidemic strain, BI/NAP1, in eight health care facilities over the past five years. This strain is associated with increased resistance to fluoroquinolone as well as the presence of a novel toxin known as binary toxin CDT.

SEE P. 2433; EDITORIAL, P. 2503; CME, P. 2527

ORIGINAL ARTICLE

Clonal Outbreak of a Virulent Strain of *Clostridium difficile*

In the first half of 2003, the number of *C. difficile* infections (22.5 per 1000 admissions) increased in Quebec, Canada. This outbreak was associated with fluoroquinolone and cephalosporin use as well as an increase in *C. difficile*-associated mortality (to 6.9 percent) and colectomy (to 1.9 percent). The outbreak strain was found to have enhanced virulence, as suggested by the presence of binary toxin genes and the partial deletion of a toxin-repressor gene.

SEE P. 2442; EDITORIAL, P. 2503

ORIGINAL ARTICLE

Febuxostat vs. Allopurinol for Gout

In this randomized trial of patients with elevated uric acid levels and gout, febuxostat, a new nonpurine selective inhibitor of xanthine oxidase, was compared with allopurinol. The incidence of gout flares was similar in patients treated with allopurinol and febuxostat. Both doses of febuxostat (80 and 120 mg) were more effective than 300 mg of allopurinol in lowering uric acid levels.

SEE P. 2450; EDITORIAL, P. 2505; CME, P. 2526

ORIGINAL ARTICLE

Infliximab for Ulcerative Colitis

Infliximab is a monoclonal antibody against tumor necrosis factor α and is effective in the treatment of Crohn's disease. This article reports the results of two randomized, placebo-controlled trials of infliximab in patients who had active ulcerative colitis despite conventional therapy. Infliximab was more effective than placebo in achieving and maintaining clinical response and remission.

SEE P. 2462

MEDICAL PROGRESS

Renal-Cell Carcinoma

In the United States, renal cancer is the 7th leading malignant condition in men and the 12th in women, accounting for 2.6 percent of all cancers. This article discusses the evolving presentation, understanding, and treatment of this disease.

SEE P. 2477; CME, P. 2525

CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

A Man with Cardiac Arrest while Sleeping

A 35-year-old man screamed during sleep and became unresponsive. Personnel from emergency medical services found him in ventricular fibrillation; normal rhythm was restored, but he did not regain consciousness. An electrocardiographic examination in the emergency department showed ST-segment elevation, and there was evidence of pseudoephedrine in the serum. The results of cardiac catheterization were normal. A diagnostic procedure was performed.

SEE P. 2492

CLINICAL IMPLICATIONS OF BASIC RESEARCH

Understanding Heme Transport

A newly identified protein — heme carrier protein 1 — apparently mediates the uptake of cellular heme. Mutations impairing the activity of this protein might account, in part, for the broad spectrum of clinical severity observed in patients with genetic hemochromatosis.

SEE P. 2508