# Medi-notes

## Efficacy of intravitreous cidofovir for treatment of cytomegalovirus retinitis in patients with AIDS

Although cytomegalovirus retinitis remains a major cause of ocular disorders in patients with the acquired immunodeficiency syndrome (AIDS), existing therapies for this condition have been relatively ineffective and toxic.

In this trial, with 22 patients with AIDS and cytomegalovirus retinitis enrolled between April 1994 and January 1995, the investigators evaluated the efficacy of intravitreous cidofovir alone for initial and maintenance therapy for cytomegalovirus retinitis. In 15 of 32 affected eyes of one group, intravitreous cidofovir was administered as the initial treatment for cytomegalovirus retinitis. Seventeen eyes of another group had previously been treated with intravenous therapy.

All eyes were intravitreously injected with 20 μg of cidofovir at 5- to 6-week intervals. No patient in either group received systemic anticytomegalovirus therapy at any time during the study period.

The mean duration of follow-up was 15.3 weeks (range, 5 to 44 weeks). Of the eyes with active retinitis, 100% healed in response to the initial injection. In two eyes, both in a patient with clinically resistant retinitis, two episodes of retinitis progression occurred (one in each eye).

In 3% of eyes, the retina became detached. Mild iritis developed after 14% of the injections that had been preceded by prophylaxis with oral probenecid. Irreversible, visually significant hypotonia developed in one eye.

The investigators concluded that treatment and subsequent maintenance of cytomegalovirus retinitis with 20 μg of intravitreously injected cidofovir, given at 5- to 6-week intervals, is safe and highly effective.

Rahhal FM, Arevalo JF, de la Paz, EC, et al: Treatment of cytomegalovirus retinitis with intravitreous cidofovir in patients with AIDS. *Ann Intern Med* 1996;125:98-103.

## Artemether versus quinine for severe falciparum malaria

Artemisinin (ginghaosu) and its derivatives—the water-soluble hemisuccinate artesunate and the oil-soluble artemether—are rapidly effective antimalarial drugs. Preliminary studies suggest that these drugs may be more effective than quinine in the treatment of severe malaria. The authors conducted the artemether study in Vietnam, where *Plasmodium falciparum* has reduced sensitivity to quinine.

In a double-blind trial involving 560 adults with severe falciparum malaria, 276 patients received intramuscular quinine dihydrochloride (20 mg/kg of body weight followed by 10 mg/kg every 8 hours), and 284 patients received intramuscular artemether (4 mg/kg followed by 2 mg/kg every 8 hours). Both drugs were administered for at least 72 hours.

The artemether group had 36 deaths and the quinine group, 47. Artemether cleared the parasites more quickly from the blood of the patients than the quinine. In the artemether group, however, fever resolved more slowly (127 hours vs 90 hours), recovery time from coma was longer (66 hours vs 48 hours), and hospitalization was longer (288 hours vs 240 hours).

Quinine, a potent stimulator of insulin secretion by pancreatic beta cells, was associated with an increased risk of hypoglycemia. No other serious side effects were observed in either the artemether or the quinine group.

The trial results indicate that artemether is a satisfactory alternative to quinine for the treatment of severe malaria in adults.

Hien TT, Day NPJ, Phu NH, et al: A controlled trial of artemether or quinine in Vietnamese adults with severe falciparum malaria. *N Engl J Med* 1996;335:76-83.

## Co-trimoxazole reduces relapses in patients with Wegener's granulomatosis

Co-trimoxazole (800 mg of sulfamethoxazole and 160 mg of trimethoprim) was studied for efficacy in preventing relapses in patients with Wegener's granulmatosis in remission.

Eighty-one subjects (41 patients, 40 control subjects) were randomized to receive either co-trimoxazole or placebo twice daily for 24 months in addition to their usual medication. All patients, seen at least once every 3 months during the 24-month treatment period, were evaluated for signs of disease activity, compliance with treatment regimen, side effects of the therapy, and evidence of infection. According to the protocol, the standardized follow-up ended at 27 months.

During the trial, eight (20%) of the patients in the co-trimoxazole group experienced side effects that resolved after the study medication was stopped.

According to life-table analysis, 82 % of the patients in the co-trimoxazole group remained in remission at 24 months compared with 60% of those in the placebo group. There were fewer respiratory tract infections and non–respiratory tract infec-