CLINICAL CAPSULES

Hydrocortisone for Pneumonia

Hydrocortisone infusion in patients with severe community-acquired pneumonia leads to earlier resolution and prevents development of sepsis-related complications, a prospective multicenter study suggests.

A total of 46 patients with severe community-acquired pneumonia were enrolled and randomized to receive protocol-guided antibiotic treatment plus 7 days of hydrocortisone infusion or placebo. Hydrocortisone was given as an intravenous 200-mg loading bolus followed by infusion of 240 mg in 500 cc of 0.9% saline at a rate of 10 mg/hour, Marco Confalonieri, M.D., of Trieste, Italy, and his colleagues reported.

At study day eight, 20 of 23 patients in the treatment group, compared with 9 of 23 controls, had improved ratios of arterial oxygen pressure to fraction of inspired oxygen. Significantly greater reductions in multiple organ dysfunction syndrome scores and chest radiograph scores were observed in the treatment group. C-reactive protein (CRP) levels, which were higher in the treatment group at study entry, fell by more than 50% in 21 of 23 patients, compared with 5 of 23 controls (Am. J. Respir. Crit. Care Med. 2005;171:242-8).

Patients with persistent CRP elevations had a higher incidence of delayed septic shock than those with reduced CRP levels (nine vs. zero patients). Also reduced in the treatment group were duration of mechanical ventilation (median 4 vs. 10 days), hospital stay (median 13 vs. 21 days), and 60-day mortality (0% vs. 38%).

Poliomyelitis Eradication

Efforts to eradicate poliomyelitis suffered a setback in 2004, according to the Centers for Disease Control and Prevention.

The most progress was made in Egypt and in three Asian countries where the disease is endemic: during peak transmission season, the number of cases was the lowest ever reported in those countries. However, a resurgence of poliomyelitis in 2 African countries spread to a total of 14 countries that had not reported polio for more than 1 year (MMWR 2005;54:408-12).

Eradication efforts should focus on high-quality vaccination campaigns and on monitoring surveillance quality to ensure rapid detection of circulating virus or importation and a timely response, according to the CDC, which stresses that the greatest threat to eradication is continued failure to vaccinate all high-risk children.

RSV Common in Adults

Respiratory syncytial virus is at least as common as influenza A in elderly and high-risk adults and is an important disease in this population, a large prospective study suggests.

The study included 608 healthy adults aged 65 or older, 540 adults over age 20 with chronic heart or lung disease, and 1,388 patients hospitalized with acute pulmonary conditions, who were evaluated for respiratory illnesses over four consecutive winters. RSV infection was identified in 102 patients from the prospective cohorts and 142 of the hospitalized patients; influenza A was diagnosed in 44 and 154 of those two groups, respectively, Ann R. Falsey, M.D., of Rochester (N.Y.) General Hospital and her colleagues reported.

RSV and influenza were symptomatic in a similarly high percentage of cases (89% and 91%), and both resulted in considerable health care use. Forty-two percent of elderly patients with influenza A and 17% with RSV sought medical attention, and 60% of the high-risk adults with influenza A and 29% with RSV sought medical attention (N. Engl. J. Med. 2005;352:1749-59).

The findings confirm the importance of influenza A in adults, but also document the importance of RSV in these populations, and underscore the need for development of an effective vaccine against RSV.

Aspiration Pneumonia Rx

Intravenous clindamycin therapy was as effective as but lower in cost than three other recommended antibiotic regimens for the treatment of mild to moderate aspiration pneumonia in elderly patients in a prospective, randomized study.

In 100 patients treated twice daily with either 1.5 g or 3 g of IV ampicillin/sulbactam, 0.5 g of IV panipenem/betamiprom, or 600 mg of IV clindamycin, cure rates were similar (76%-88%), as were duration of IV treatment (8-10 days) and number of adverse events (3-4), reported Maiko Kadowaki, M.D., and colleagues at the University of Fukui (Japan) (Chest 2005;127:1276-82).

Based on treatment duration, clindamycin therapy cost about $127, compared with $208 for the lower dose of ampicillin/sulbactam, $444 for the higher dose of ampicillin/sulbactam, and $258 for panipenem/betamiprom. Clindamycin was also associated with a lower rate of posttreatment methicillin resistant *Staphylococcus aureus*: zero cases vs. five cases in each of the ampicillin/sulbactam groups and eight cases in the panipenem/betamiprom group.

—Sharon Worcester