Metronidazole Treats Non-GABHS Tonsillitis

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WASHINGTON — Metronidazole is effective in the treatment of non–β-hemolytic streptococcal tonsillitis, Itzhak Brook, M.D., reported in a poster presentation at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

Although group A β-hemolytic streptococcus (GABHS) is one of the major causes of tonsillitis, other aerobic as well as anaerobic organisms have been isolated from both normal and inflamed tonsils. The exact role of these organisms is uncertain, and some are believed to be part of the normal oropharyngeal flora, said Dr. Brook, professor of pediatrics at Georgetown University, Washington.

The option of using metronidazole (250 mg every 12 hours for 10 days) was offered to 40 children (mean age 9 years) who presented with sore throat and massive tonsillar enlargement plus at least one of the following: anterior cervical adenitis, temperature higher than 38.3° C, and pharyngeal or tonsillar exudates or pharyngeal injection.

Rapid streptococcal antigen tests were negative in all the patients, and cultures of the tonsils showed no growth of β-hemolytic streptococci, including group A. None of the children had Epstein-Barr antibodies on immunofluorescence.

The 20 who chose metronidazole were similar to the 20 who did not with respect to age, race, sex, family size, current clinical findings, and previous antibiotics.

Compared with the children who remained untreated, those given metronidazole had significantly lower rates of fevers over 38° C after 1 day (11 vs. 17 children) and after 2 days (3 vs. 9 children), fewer sore throats after 1 day (12 vs. 19) and 2 days (9 vs. 16), and lower rates of tonsillar enlargement after 3 days (11 vs. 16) and 5 days (8 vs. 14). Pharyngeal injection at 2 days also was reduced with metronidazole, Dr. Brook reported at the conference, sponsored by the American Society for Microbiology.

Metronidazole was chosen for this study because it is effective against anaerobic bacteria but has virtually no activity against facultative and aerobic bacteria. These findings add to previous data suggesting a pathogenic role of anaerobes in the acute inflammatory process in the tonsils. ■

Oseltamivir Reduces Rates Of Pneumonia

WASHINGTON — Oseltamivir's benefits aren't limited to treating and preventing influenza, Beth L. Nordstrom, Ph.D., reported in a poster presentation at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

Oseltamivir (Tamiflu) is indicated for the treatment of influenza in patients aged 1 year and older who have been symptomatic for no more than 2 days, and for prophylaxis of influenza in persons aged 13 years and older.

Now, new data suggest that oseltamivir also significantly reduces the risk of pneumonia in all age groups, and the rates of antibiotic use and hospitalization in the oldest and youngest patients, said Dr. Nordstrom, of Ingenix Epidemiology, Auburndale, Mass.

In a retrospective cohort study sponsored by Hoffman-La Roche, claims data from a large U.S. insurer containing a diagnosis of influenza were analyzed.

Among children aged 1-12 years, the proportion with a diagnosis of pneumonia was 0.7% among the 586 for whom oseltamivir was dispensed on the day of influenza diagnosis, compared with 2.5% of the 17,886 who did not receive oseltamivir, a 66% risk reduction.

In patients aged 13-59, pneumonia was diagnosed in 1.3% of the 10,649 who received the drug, compared with 2.1% of the 41,007 who did not—a reduction of 19%. In adults aged 60 and above, the difference was 1.7% of 463 with oseltamivir versus 8.8% of 3,298 without, a 59% drop.

Antibiotic use dropped with oseltamivir by 30% in the 1- to 12-year-olds, by 9% in the 13- to 59-year-olds, and by 14% in the 60-plus group. Hospitalizations were reduced by 71% with oseltamivir in the 1- to 12-year-olds, by 25% in 13- to 59-year-olds, and by 45% in the 60-plus patients.

—Miriam E. Tucker