

Respiratory Tract Infection Rx Habits Highlighted

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SAN FRANCISCO — Internists prescribed the most broad-spectrum antibiotics and pediatricians the most narrow-spectrum antibiotics for respiratory tract infections in a national managed care population, Katie J. Suda, Pharm.D., reported in a poster presentation at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

"Looking at a managed care population, a majority of them aren't going to have ten different diseases. In general, you don't need broad-spectrum therapy right off the bat," said Dr. Suda of the University of Tennessee, Memphis.

She and her associates performed what may be the first national analysis of outpatient antimicrobial prescribing for respiratory tract infections by specialty. They

For upper respiratory tract infections, pediatricians most often prescribed penicillins, then macrolides and beta-lactamase inhibitors.

studied databases from nine managed care organizations for 48,182 antibiotic prescriptions by 7,613 physicians for 26,875 patients with respiratory tract infections from 2001 through 2003, excluding cases in which the drug was

dispensed for more than 27 days. Treatment averaged 10 days for patients in the study.

Among the physicians, 21% were pediatricians, 39% were family physicians, 4% were internists, 3% were general medical physicians, 5% were emergency medicine physicians, and 5% each were specialists in infectious diseases, gastroenterology, or other specialties. Four percent of physicians were dermatologists, 3% were ob.gyns., 3% were surgeons, and other physicians composed 3% of the total.

The bulk of treatments consisted of penicillins (29%) or macrolides (27%), with fluoroquinolones accounting for 15%, she reported at the meeting, which was sponsored by the American Society for Microbiology. Cephalosporins made up 14% of prescriptions, tetracyclines were 6%, and 9% were other drugs.

For upper respiratory tract infections, pediatricians most often prescribed penicillins (in about 42% of prescriptions), followed by macrolides (about 22%) and beta-lactamase inhibitors (16%).

Emergency physicians and internists favored macrolides for upper respiratory tract infections, in about 51% and 40% of prescriptions, respectively. They ordered beta-lactamase inhibitors second most commonly, in about 30% of prescriptions.

Family physicians and specialists wrote predominantly for beta-lactamase inhibitors, in about 40% of prescriptions for upper respiratory tract infections.

Internists led other physicians in prescribing fluoroquinolones, composing 20% of their prescriptions for upper respira-

tory tract infections. Fluoroquinolones made up approximately 1% of prescriptions by pediatricians for this indication, 10% by emergency physicians, 11% by family physicians, and about 13% by specialists.

For lower respiratory tract infections, pediatricians favored macrolides (about 58% of prescriptions) and beta-lactamase inhibitors (39%). They ordered fluoroquinolones only about 2% of the time.

Fluoroquinolone use was much higher among other physicians for lower respira-

tory tract infection, composing around 43% of prescriptions by internists, 40% by family physicians, and 30% by emergency physicians. These physicians used more broad-spectrum agents for lower than for upper respiratory tract infections, Dr. Suda noted.

Comorbidities were more common with lower than with upper respiratory tract infection. Nearly 10% of lower respiratory tract infections were accompanied by pulmonary problems, 7% had car-

diovascular problems, 5% had endocrine morbidities, 5% had oncologic problems, and around 4% had gastrointestinal comorbidities.

Diagnoses of upper respiratory tract infections were accompanied by pulmonary problems in 5% of cases, cardiovascular comorbidities in 4%, gastrointestinal problems in 3%, endocrine problems in 2%, and oncological comorbidities in less than 2%.

Patients averaged 34 years in age, ranging from 3 months to 101 years old. ■

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References: 1. Centers for Disease Control and Prevention. Pertussis Surveillance Report—2004 (final data). Issued 8/12/05. 2. Centers for Disease Control and Prevention. *Epidemiology and Prevention of Vaccine-Preventable Diseases*. Reported Cases and Deaths from Vaccine Preventable Diseases, United States, 1950-2003. Available at <http://www.cdc.gov/nip/publications/pink/appendices/G/cases&deaths.pdf>. Accessed May 10, 2006. 3. Centers for Disease Control and Prevention. *Epidemiology and Prevention of Vaccine-Preventable Diseases*. Atkinson W, Hamborsky J, McIntyre L, Wolfe S, eds. 9th ed. Washington, DC: Public Health Foundation;2006: 84. 4. PEDIARIX Prescribing Information.

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