Survey: Physicians Not Heeding AOM Guidelines

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Many pediatricians and family physicians are not following recommended guidelines on the management of acute otitis media set by their professional organizations, results from a survey suggest.

Dr. Louis Vernacchio of the Slone Epidemiology Center at Boston University and his colleagues found while many pediatricians and family physicians believe the observation method—recommended by the American Academy of Pediatrics and American Academy of Family Physicians—is reasonable, they only used that method in 15% of the cases they diagnosed.

Even though acute otitis media (AOM) is considered "one of the most common illnesses for which children are brought to physicians," and other studies have shown "the concept of initial observation without antibiotic treatment has been adopted as standard practice in some parts of the world," AOM continues to be a management challenge for primary care providers, the researchers wrote.

According to the academies' 2004 clinical practice guideline, "Diagnosis and Management of Acute Otitis Media," observation is an option for children 2 years and older with nonsevere symptoms or uncertain diagnosis and for those aged 6 months to 2 years old with both nonsevere symptoms and an uncertain diagnosis. The guideline was a joint response from the two organizations as a result of the established international acceptance of the observation method and because "the widespread emergence of antimicrobial resistance has increased the urgency to reduce antibiotic use," Dr. Vernacchio and his associates said.

From a 2006 survey by mail or fax completed by 299 pediatricians or family physicians from the Slone Center Office Research (SCOR) Network, the researchers found that the proportion of physicians accepting the concept of the observation option actually decreased slightly from 88% in 2004 to 83% in 2006 (Pediatrics 2007 Aug. [Epub doi:10.1542/peds.2006-3601]).

The SCOR Network of physicians represents physicians who practice in private and community settings in 42 U.S. states. The participating physicians were surveyed twice—once after the publication of the guidelines in 2004 and then 18 months later (March-June 2006). Of the 299 physicians participating in the 2006 survey, 207 responded to the 2004 survey.

Pediatricians (compared with family physicians), suburban and urban non–inner city practices, and younger physicians were more accepting of the observation method.

Despite the small number of physicians using the observation method regularly, the researchers discovered that the physicians overall were more willing to follow the academies' antibiotic recommendations.

A little more than half (57%) of the physicians agreed with the guideline dosages and antibiotics used to treat nonsevere AOM, and 43% agreed that high doses of amoxicillin-clavulanate (80-90 mg/kg per day) were appropriate for severe cases (moderate to severe otalgia or fever of 39° C or higher) that failed amoxicillin. But once again, the researchers discovered the number of physicians agreeing with the guideline in comparison to 2004 has decreased as physicians found alternative treatments or dosages.

For example, only 17% of physicians administered the recommended intramuscular ceftriaxone for cases that failed the recommended high doses of amoxicillin-clavulanate, while increasing numbers of physicians are choosing to treat with oral antibiotic alternatives such as cefdinir (52%) or azithromycin (16%).

The survey also revealed a growing trend of physicians opting to treat with a standard dose of amoxicillin (40-45 mg/kg per day). In 2004, the number of physicians treating nonsevere AOM with a standard dose of amoxicillin was 22%; in 2006, that number jumped to 33%. The researchers surmise this trend could be attributed to recent data that "widespread use of the heptavalent pneumococcal conjugate vaccine has reduced the circulation of penicillin-resistant *Streptococcus pneumoniae* in some communities."

In the survey, physicians identified "parental reluctance" (84%) and "the cost and difficulty of follow-up of children who do not improve" (31%), and demand for antibiotics (84%) as the three top barriers to the use of observation in their practice. ■