

## Antibiotics May Not Be Necessary for Pediatric Ear Infections

Acute otitis media, or AOM, is believed to be responsible for up to 60 percent of all antibiotic prescriptions written for children. The use of this therapy in the treatment of AOM remains controversial, however; in fact, many scientists cite overuse of antibiotics as a contributing factor to the emergence of drug-resistant bacteria. A new study published in *Pediatrics* suggests that a nonprescription-based alternative to antibiotic administration may be just as effective in the treatment of AOM.

In this study, 223 children (ages 6 months to 12 years) with nonsevere AOM were randomized to receive a course of antibiotics (ABX; amoxicillin plus symptom medication), or watchful waiting (WW), in which symptom medication was administered (but no antibiotics). Children were evaluated for the severity of AOM at enrollment, after which the children's parents received information about the risk and benefits of WW, and how to recognize if an AOM infection increased in severity. The degree of infection was measured during follow-up visits at 12 days and 30 days, and instances in which parents returned with the child for an interim visit because of treatment failure or recurrence of AOM.

Results showed that while parents in the ABX group gave their children fewer doses of pain medication, and the failure rate was 16 percent lower among patients in the ABX group than patients in the WW group, strains of *streptococcus pneumoniae* bacteria obtained from children given antibiotics were more likely to be drug-resistant than children in the watchful waiting group. In addition, parent satisfaction scores among both groups were nearly identical, and the costs of treatment were an average of \$35.98 less per patient in the watchful waiting group compared to patients in the ABX group.

**Conclusion:** "Our results suggest that some children with nonsevere AOM may be observed with WW as long as they maintain nonsevere status and are kept comfortable with appropriate symptom management. Under these conditions, WW seems to be an alternative that is acceptable to parents, reduces the number and cost of ABX prescriptions, and reduces the percent of multidrug-resistant bacteria colonizing the nasopharynx of children after an episode of AOM."

McCormick DP, Chonmaitree T, Pittman C, et al. Nonsevere acute otitis media: a clinical trial comparing outcomes of watchful waiting versus immediate antibiotic treatment. *Pediatrics* June 2005;115(6):1455-1465.