

Editorials: *Controversies in Family Medicine*

Should Children with Acute Otitis Media Routinely Be Treated with Antibiotics?

Yes: Routine Treatment Makes Sense for Symptomatic, Emotional, and Economic Reasons

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In the literature, the role of antibiotics in the treatment of acute otitis media (AOM) is clear but disappointing. There is a significant, but only modest, benefit of antibiotics for AOM. Because of these disappointing results, many experts and clinicians have decided that, as a practical matter, it is unnecessary to prescribe antibiotics for children with AOM—at least during the first three days, with the possible exception of children younger than two years. The demonstrated benefits are an average of one less day of pain and fever, which is about evenly offset by the risk of adverse effects, mainly rash, diarrhea, and allergic reactions.¹⁻³ These benefits warrant discussion with parents for shared decision making regarding treatment.

A 2009 systematic review of 11 trials found that persistence of symptoms two to four days after treatment was 25% less likely with antibiotics than with placebo or watchful waiting (relative risk = 0.75; 95% confidence interval, 0.64 to 0.88).¹ A 2010 systematic review of 135 articles found that one more patient had short-term resolution for every nine treated with antibiotics compared with placebo.² A 2011 systematic review of 11 trials found a similar likelihood of resolution of AOM symptoms with immediate antibiotic treatment.³

In this context, it is fair to say that the decision of whether to treat AOM in children is a close call. In such a situation, should a physician automatically make the decision for the parents and the child? Because we have increasingly emphasized shared decision making in family medicine, would it not be more appropriate to elicit input from the parents? Restated, is it not perfectly reasonable for parents, for both emotional and rational



This is one in a series of pro/con editorials discussing controversial issues in family medicine.

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reasons, to consider a small but statistically significant symptomatic benefit for their child at the risk of a rash or diarrhea? Adding support to a parental decision to treat is the recent finding of an economic benefit of immediate treatment, because parents of children in a delayed treatment group missed more work days compared with parents of children in an immediate treatment group (mean of 2.1 vs. 1.2; $P = .03$).⁴ On the other hand, it is also reasonable for a parent to prefer no treatment to avoid potential adverse effects.

Thus, immediate treatment of symptomatic children with AOM is eminently reasonable in view of the available medical literature. Moreover, parental preference for antibiotic treatment should be considered and respected.

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