Dynamic Chiropractic

PEDIATRICS

Revisiting the Antibiotic Issue

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The American Academy of Pediatrics and the American Academy of Family Physicians recently presented their new guidelines regarding acute otitis media (AOM) and antibiotics.[1] It appeared from all the headlines that antibiotics were on the way out. However, at best, the guidelines continue to allow a very wide opportunity for the treating physician to provide them for children; the guidelines may just delay antibiotics by a few days.

Although the overall number of visits to pediatricians for otitis media with effusion (OME, or middle ear fluid) has decreased from 25 million in 1990 to 16 million in 2000, the disheartening news is that antibiotic prescriptions for AOM have remained the same. In 2000, the number of antibacterial prescriptions was 802 per 1,000 visits - or more than 13 million prescriptions. Fifty percent of all the prescriptions were given to preschool children with ear infections.

With AOM, there are also direct and indirect social costs to this illness: parents who lose time from work and children who miss school. In 1995, the estimated direct cost of AOM was $1.96 billion, and the indirect cost was estimated at $1.02 billion. These costs do not include the cost of antibacterial treatments, which may range from $10 to $100 per individual course.

The AAP/AAFP committee's report further notes that the protocol for treating AOM varies in the United States and Europe. In many European countries, it begins with the management for pain, waiting to institute antibiotics if improvement is not seen. The opposite is true in the U.S.: The majority of children will be treated with antibiotics from the start.

Many individuals among the medical community and the general public have voiced their concerns about the rising rates of antibacterial resistance, the growing costs of antibacterial prescriptions and the judicious use of antibiotic agents.

There are new guidelines for the diagnosis and management of AOM for children 2 months to 12 years of age, without signs or symptoms of systemic illness unrelated to the middle ear.

The first guideline addresses the diagnosis of acute otitis media, which includes history of acute onset of signs and symptoms; the presence of middle-ear effusion (bulging of, limited or absent mobility of the tympanic membrane or air fluid behind the tympanic membrane or otorrhea); and signs and symptoms of middle-ear inflammation (distinct erythema of the tympanic membrane or distinct otalgia that interferes with or precludes normal activity or sleep).

The second recommendation deals with the management of AOM, which should include an assessment of pain. If pain is present, the clinician should recommend treatment to reduce pain. The most common recommended treatment course is acetaminophen and ibuprofen. The committee further acknowledges that there are various "other" treatments (home remedies, naturopathic and homeopathic agents), although there are few published studies of support. Most importantly, the clinician should consider benefits and risks to the child when recommending any pain relief management.

For Whom Should Antibiotics Be Prescribed?

- children ages 6 months and younger, for certain or suspected AOM;
- children ages 6 months to 2 years, for certain AOM or suspected AOM with severe symptoms (Observation is an option for suspected or uncertain AOM if non- severe); and
- children ages 2 to 12 years - antibiotic treatment for certain AOM with severe symptoms. (Observation is an option for suspected or nonsevere AOM.)

The guidelines present an option to observe select children, and only initiate antibiotic treatment if symptoms have not improved in 48 to 72 hours. It is noted that approximately 80 percent of children with AOM get better without antibiotics, and that children whose ear infections are not treated immediately with antibiotics are not likely to develop a serious illness.

What Are the Harmful Effects of Antibiotics?

According to the report: "Each course of antibiotics given to a child can make future infections more difficult to treat. The result is an increase in the use of a larger range of - and generally more expensive - antibiotics. In addition, the benefit of antibiotics for AOM is small, on average, and must be balanced against potential harm of therapy. About 15 percent of children who take antibiotics suffer from diarrhea or vomiting and up to 5 percent have allergic reactions, which can be serious or life-threatening. The average preschooler carries around 1 to 2 pounds of bacteria - about 5 percent of his or her body weight. These bacteria have 3.5 billion years of experience in resisting and surviving environmental challenges. Resistant bacteria in a child can be passed to siblings, other family members, neighbors, and peers in group-care or school settings."[1]

The new guidelines further recommend that clinicians take an active role in preventing AOM. A few suggestions include:

- altering child care center attendance;
- breastfeeding for the first six months;
- avoiding supine bottle-feeding (bottle-propping);
- reducing or eliminating pacifier use in the second six months of life; and
- eliminating exposure to passive smoke.

So - What Should the Doctor Order?

Wait and watch for the first 24 to 72 hours. Sixty percent of all children will be better within a 24-hour period; 80 percent to 90 percent of children will be over the worst within a few days. The only recommendation to parents should be the use of acetaminophen and ibuprofen for pain management.

What About Complementary and Alternative Medicine?

The report provides no recommendations in this regard, due to limited and controversial data. Unfortunately, there are no complementary or alternative doctors on the committee that established the new guidelines, and no chiropractic studies are referenced.

Reference

1. http://aap.org/advocacy/releases/aomqa.htm.

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