

Antibiotics for Ear Infection- Too Much Meddling?

Ear Infection

I'm continually amazed at the miracle of the human body and its ability to adapt, adjust, recover and survive the continuous assaults to which it is subjected. I'm equally amazed at our tendency as both physicians and patients to ignore this miracle, and assume that we have to do something heroic to help our bodies deal with our hostile environment. A case in point is that of ear infection, or otitis media (OM). This is the commonest reason for a child to visit a practitioner during the "cold" season, and accounts for about \$5 billion worth of medical costs annually worldwide. One in three children will suffer a bout of OM before age three. Ear infection usually starts with a viral upper respiratory infection or "cold". A shorter and more vertical eustachian tube in children allows viruses and bacteria more ready access to the middle ear, and the opening of the tube in the throat tends to close due to swelling of the mucous membranes. This infected middle ear chamber then cannot drain normally, and pressure builds from the infected fluid, causing pain and temporary partial hearing loss. Study after study has shown that 75% of children with OM will recover spontaneously. This means that three out of four will not need antibiotics for their infection. Yet most US physicians will treat OM with antibiotics at the time of the first office visit. In Europe, on the other hand, most children with OM are initially treated only with pain medication and decongestants, and followed carefully with return visits or phone calls. Those that don't improve usually do need antibiotics, both to relieve discomfort and to prevent chronic infection, hearing loss, and delayed speech development. Our unwillingness to wait to use antibiotics typifies everything American. We want predictability, so we treat to "assure" improvement. We want convenience, so we treat to avoid the bother of another office visit or phone call. We want instant relief for the child, so that we don't have to worry about that nighttime dose of pain medicine. We want to do something so that we won't feel guilty over not being a good parent or physician. In fact, all these reasons are bogus. Antibiotics do not assure improvement. Antibiotic failures are common in treatment of OM. Multiple courses of antibiotics for OM can be a nightmare for parents and physicians. Return visits are about as common in treated children as in untreated, according to European studies. Antibiotics don't relieve pain instantly, and analgesic medication is usually required whether antibiotics are used or not. And what is best for the child in the long term should be our focus, and this may well be withholding antibiotics and allowing the child's own defenses to deal with the infection. Homeopathic treatment for OM and other diseases is becoming increasingly popular in this and other countries, and little wonder. Though I do not subscribe to the homeopathic theory (perhaps the subject of a future column), by treating with harmless substances it takes advantage of a "wait and see" approach, and give our miraculous immune system time to suppress the infection and restore normal function. Much if not most complications and chronic persistence of ear infections, like many other illnesses are caused by things that change the natural balance between us and our environment. Bottle feeding, especially while the child is lying down, exposure to second-hand smoke, and early exposure to large numbers of children (as in day care prior to age two) are all factors that increase the risk of OM. And there is some evidence that overuse of antibiotics may also promote chronic and recurrent ear infections. As physicians we should be less trigger-happy with the pen and Rx pad. And as parents, we should be

more willing to "wait and see." We can't always be in total control of what those little bodies are going to do; if we try too hard, we may just foul things up.