

## Ear Infections (Otitis Media)



## **Causes**

Most children have an ear infection at some time. Usually a complication of a cold, these are infections of the middle ear, the space behind the eardrum. It happens when the cold blocks off the eustachian tube, a tiny passage that connects the ear to the back of the throat. This allows fluid to collect in the middle ear and become infected by bacteria. The infection causes pressure to build up in the middle ear, causing pain. Breastfeeding decreases the number of ear infections. Children in daycare and children in households with tobacco smoke get more ear infections. Leaving a child's ears uncovered does not cause ear infections.

## **Symptoms**

Older children will complain of an earache or muffled hearing. Younger children may cry or scream, tug at the ear, or sleep poorly. Symptoms are usually worse at bedtime or after lying down for a few hours. Another clue to an ear infection is the re-appearance of fever (100.4°F or above) more than 3 or 4 days into a cold. Unfortunately, none of these symptoms is very specific, so examining the eardrum is the only way to diagnose an ear infection. In about 5% to 10% of ear infections, the eardrum ruptures and a yellow or cloudy discharge comes out the ear canal. This does not mean the infection is more severe, but it does require some eardrops. The perforation (hole) in the eardrum usually heals up within a week.

## **Treatment**

The pain from an ear infection will usually stop by 2-6 hours regardless of treatment. Use acetaminophen (Tylenol) or ibuprofen (Motrin or Advil) to treat both pain and any fever that may be present. A bag of ice wrapped in a wet washcloth placed over the ear can give some pain relief. Some children prefer a heating pad. In either case, remove the heat or cold after 20 minutes to prevent damage to the skin. Even though the pain usually disappears after a few hours, we still need to see your child the next day to examine the eardrum.

Antibiotics will kill the bacteria causing the infection. **Antibiotics will not relieve the pain for the first two days.** Use a syringe for dosing liquid antibiotics. Give all the medicine prescribed for the amount of time noted. If you miss a dose, give it as soon as you remember and continue until all the medicine is gone. Never use antibiotics left over from a previous illness because it loses its strength and will confuse the diagnosis. For the ear to get well, not only must the bacteria be killed, the fluid in the middle ear must also drain out through the eustachian tube. We will reexamine the eardrum in a few weeks to make sure this has occurred. Air travel, playing outdoors, and attending school are okay if your child feels well. Unless the eardrum is ruptured, swimming is okay.

Call the office if your child has any of the following symptoms:

- Your child develops a stiff neck or severe headache.
- Your child can't walk normally.
- The pain is severe (your child is screaming).
- Your child is acting unusually sick or you are worried.