

# Otitis Media

## *What is otitis media?*

Irritation of the middle ear, which is the space between the eardrum and the cochlea, is otitis media. Secretory means fluid has come into that space normally only filled with air. It is hard to know if the fluid is infected with viruses or bacteria. Otitis media typically is a complication of a cold, where swollen nasal passages block off the eustachian tube (the passage connecting the middle ear to behind the nasal passages in the back of the throat).

## *What are symptoms of an acute ear infection?*

The most common symptoms of an acute ear infection are ear pain and fever a few days after having a regular cold. Your child may also be irritable, have trouble hearing, or not feel like eating or sleeping. Most children will have at least one ear infection, and many will have repeated ear infections. In up to 10% of children, the eardrum ruptures and drains a yellow or cloudy fluid. Sometimes specialists will intentionally make a hole in the eardrum to drain the fluid. Avoid putting your head under the water if you have a ruptured eardrum. This heals quickly most of the time.

## *Will ear infections hurt my child's hearing?*

Hearing is decreased any time there is fluid in the middle ear. Even after adequate otitis media treatment, fluid may remain for 6 weeks, and that whole time you won't hear as well from that ear. This is only temporary and when the fluid is gone the hearing should return to normal. If your child is learning to talk, the difficulty hearing themselves and others may cause a temporary delay in their progress. Most kids "catch-up" on language skills when the fluid clears up. Tell your Caring Family doctor if your child has persistent language problems, however.

## *Restrictions*

Your child can go outside and does not need to cover their ears. Swimming is permitted as long as there is no drainage from the ear due to a perforation in the eardrum. Air travel is generally safe; just have your child swallow fluids, suck on a pacifier, or chew gum during descent (going up the air can escape without assistance, it is in going down that pressure can build up). Your child can return to school or day care when he or she is feeling better and the fever is gone. Ear infections are not contagious (though the cold that started it was).

## *What if my child gets lots of ear infections?*

We have found fewer infections in babies exclusively breast-fed. They are more common with those who get lots of colds. Allergies to cat dander or smoke make for more congestion as well blocking the Eustachian tube. Some find decongestants help, but studies have not proven that, so we don't recommend it to everyone. Sometimes a child's very small eustachian tube just functions poorly and "ventilation tubes" need to be put in by the ENT surgeon. We might try three months of low dose antibiotics prior to seeing the surgeon in hopes that we can sterilize the middle ear fluid once a day and encourage a clearing of that fluid.

## *How is an acute ear infection treated?*

If we think bacteria are causing your child's ear infection, we may prescribe an antibiotic. The pain and fever should go away within 2 to 3 days of starting an antibiotic. Don't stop the antibiotics early as that encourages growth of resistant "superbugs." Use acetaminophen (Tylenol) or ibuprofen (Motrin or Advil) also for pain relief. You should not use aspirin in a child under the age of 16, because of its association with Reye's syndrome. Earaches tend to hurt more at bedtime. A virus can infect the fluid as well; we just don't have antiviral agents for that yet. We can prescribe eardrops to reduce pain if a warm (not hot) towel held on your child's ear doesn't relieve his or her pain.

## *What's an antibiotic tail?*

Fluid that enters the middle ear with an infection doesn't clear as fast as the infection itself is cleared. Fluid remains for 3 weeks half of the time and at 6 weeks 20% of kids still have fluid. Studies of reinfection after adequate treatment of an ear infection show that usually entirely different bacteria come in. So while the fluid itself is harmless, it is an unhealthy condition that bacteria can fairly easily invade and start up a new ear infection. By giving a low dose of antibiotics for another 4 weeks just following the regular dose of antibiotics (10 days) for an ear infection, we help prevent that "reinvasion." It is very difficult to get a study done on this because proof of correctness involves invasive puncturing of eardrums of babies! Dr. Giese believes that using a "tail" on certain ear infections increases our chance of staying clear of ear infections in the future.

## *When should I call my child's health care provider?*

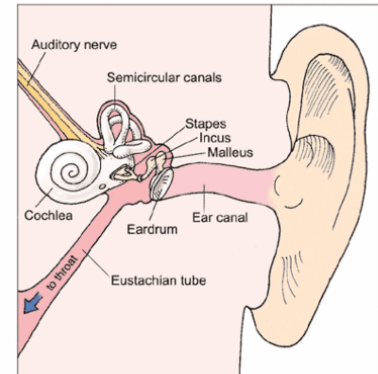
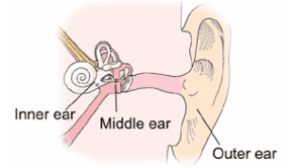
Call IMMEDIATELY if:

- Your child develops a stiff neck.
- Your child acts very sick.

Call during office hours if:

- The fever or pain is not gone after your child has taken the antibiotic for 48 hours.
- You have other questions or concerns.

## Middle Ear Infection



## Caring Family, S.C.

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