Ear Infection: Otitis Media

Otitis media (oh-TIE-tis ME-dee-uh) means the middle ear is infected or inflamed. It is the most common reason for young children to visit their primary care provider. Ear infections are usually seen in children less than three years of age, but anyone of any age can get an ear infection. There are 2 main types of otitis media: acute otitis media with effusion, and chronic otitis media with effusion. Effusion (ef-FYOO-zhun) means fluid in the middle ear space. *Acute* otitis media starts suddenly with fever, pain and irritability. *Chronic* otitis media with effusion means there is fluid in the middle ear space for 3 months or more.

*Acute* otitis media with effusion is caused by germs or viruses that grow. As they grow, they cause pus to form behind the eardrum. This infection is usually very painful. Acute otitis media without effusion is a very early infection before the middle ear fluid has formed. The eardrum is usually red and painful.

*Chronic* otitis media is less painful than acute otitis media, with or without effusion. This type of infection may occur when the eustachian (yoo-STAY-shun) tube, the tube leading from the middle ear to the throat, is not ventilating the ear correctly. Fluid cannot drain and it builds up behind the eardrum. This type of otitis media is not effectively treated with antibiotics.

These types of ear infections can cause temporary or permanent hearing loss if not treated. If your child shows signs of ear infection, he or she should be seen by a doctor as soon as possible.

**Picture 1** The outer and middle ear.
Signs and Symptoms of Acute Otitis Media (many other conditions can also cause these symptoms)

When Otitis Media comes on suddenly, you may notice:

- Pulling or rubbing the ears or rolling the head from side to side
- Fussiness
- Crying that does not stop when the child is comforted, especially at night
- Waking up at night crying
- Fever over 101°F axillary (under the arm)
- Loss of appetite (refusing to eat)
- Infants will not suck because it causes pain
- Vomiting
- Diarrhea

Signs and Symptoms of Chronic Otitis Media with Effusion

If your child is old enough to tell you, he may complain of:

- A feeling of fullness in the ears
- A popping feeling when swallowing
- Dizziness
- A feeling of motion in the ears
- Ringing in the ears
- Your child may turn up the volume on the TV or radio or sit very close to it.
- Teachers may express concern about your child’s hearing or inattention in the classroom.

Medicines

Some children with acute otitis media will be treated with antibiotics. If your doctor orders medicine, make sure you give all the medicine, even though your child feels better. Your child needs to take all the medicine to completely cure the ear infection. Often, ear infections will clear on their own without antibiotics. Tylenol® or Motrin® may be given for the fever, pain, and irritability.
How to Help Prevent Ear Infections

While most children get ear infections, there are a few things parents can do to try to prevent them:

- Breast feeding young infants may help to decrease the number of ear infections.
- Keep your child away from cigarette smoke. Do not smoke or allow smoking in your home or car.
- Always hold your baby with his head up during feeding time (Picture 2). Babies should not be fed by propping the bottle or while lying flat. The formula can get into the middle ear and cause an infection.
- **Do not leave a bottle in the crib** for the baby to drink at bedtime.
- Make sure his immunizations are up to date.
- If your child is diagnosed with acute otitis media, avoid giving him a pacifier.
- Give your child healthy foods and liquids instead of junk food.
- Dress your child properly in cold and rainy weather. (However, wearing a hat to protect the ears will not always prevent an ear infection.)

Follow-Up Appointments

After your child has taken the prescribed medicine, the doctor will want to check the ears again. Make an appointment with your child’s doctor in 2 weeks for him to be checked again.

Some children may need to have a hearing test as part of their follow-up exam. Your doctor may do this in the office or he may have an audiologist do the test.

If your child continues to have lots of ear infections, you might be referred to an ENT (ears, nose, and throat) doctor to discuss surgery.

If you need a doctor for your child, call the Nationwide Children's Hospital Referral and Information Line at (614) 722-KIDS.