Otitis Media with Effusion

Otitis media with effusion (OME) is a condition in which fluid builds up behind the eardrum in one or both ears. This condition usually occurs with a cold or after a middle ear infection, although it doesn't mean the ear is infected. Otitis media with effusion usually goes away on its own within a few months. If not, the doctor may recommend hearing tests for your child.

What is otitis media with effusion?

Otitis media with effusion (OME) refers to the presence of fluid in the middle ear and inflammation that is not caused by infection. The middle ear space, located behind the ear drum, is where ear infections (acute otitis media) typically occur. Although it is not an ear infection, OME may occur with a cold or after an ear infection.

The inflammation and fluid build-up usually clear up without any treatment, although this may take several weeks. The doctor may want to recheck your child's ear regularly to make sure the fluid clears up. Otitis media with effusion can result in some hearing loss, although it is usually mild. If the hearing problem persists, the doctor may recommend hearing tests.

What does it look like?

- Infants may have no symptoms. You may notice them tugging on or playing with their ears. Unlike ear infections, OME usually causes no pain.
- Older children may feel pressure, fullness, or popping in their ears. Ringing in the ears may also occur.
- Problems with balance may occur but are uncommon.

What causes otitis media with effusion?

Otitis media with effusion usually occurs when the normal drainage system within the ear becomes blocked. The eustachian tube is the connection between the middle ear and the throat. When this tube becomes blocked by swelling, usually from a cold or recent ear infection, fluid cannot drain from the middle ear to the throat. This allows the fluid to build up behind the eardrum.

What are some possible complications of otitis media with effusion?

• The vast majority of children with OME have no problems. The condition gets better on its own.

- Reduced hearing may occur. This is a temporary problem for most children—hearing returns to normal after the fluid is gone from inside the ear. However, hearing loss may be more of a problem if the fluid stays in the ear for a long time. For a small number of children, reduced hearing can lead to problems with speech, language, and other developmental skills if it is not treated.
- Other complications are possible but rare, such as:
 - Growth of a cyst within the ear (cholesteatoma).
 - Damage to some of the structures in the middle ear.

What puts your child at risk of otitis media with effusion?

- Middle ear infections (acute otitis media).
- Colds: Most middle ear infections and OME occur with or soon after a cold.
- Genetic factors: Middle ear disease may "run in families."
- The risk is high for Native-American children.
- Exposure to tobacco smoke (passive smoking).
- Using a pacifier may increase the risk.
- Certain medical conditions (cleft palate, Down syndrome) increase the risk.
- The risk is highest in infants and toddlers between 6 and 20 months.

How is otitis media with effusion diagnosed?

- Most often, the doctor can recognize OME by looking into your child's ear with an otoscope. Children with OME don't have the usual signs of middle ear infection: redness or pus behind the eardrum or bulging of the eardrum.
- Instead, the doctor may see fluid behind the eardrum, or the eardrum does not show the normal movement when the doctor pushes air into the ear canal.
- Medical devices such as a tympanometer or acoustic reflectometer may be used. These instruments use sound waves to tell if there is fluid behind the eardrum.

How is otitis media with effusion treated?

 Most cases of OME clear up without treatment, usually within 3 months. The doctor may want to recheck your child regularly until the fluid is gone.

- Antibiotics, steroids, decongestants, and other medications probably don't help much. Treatment for allergies, if present, might help.
- For some children with OME, hearing loss may be significant and put your child at risk for speech, language, and other problems. If fluid stays in the ears for longer than 3 to 4 months, the doctor may recommend a hearing
- Based on the results of hearing tests, other developmental issues, and the parents' feelings about these concerns, the doctor may recommend one of the following treatment approaches:
 - Waiting and watching. Otitis media with effusion usually clears up. Sometimes, it finally goes away on its own during the summer months.
 - Ear tube placement. In some situations, the doctor may recommend placing a tube through the eardrum to help drain fluid from the middle ear. This may be done if your child has more severe hearing loss, if speech or language skills are affected, or if your child is at risk of developmental problems (for example, in very premature infants).

- Ear tubes are usually placed by an ear, nose and throat specialist (otorhinolaryngologist or ENT physician).
- Tubes are usually placed under anesthesia. The procedure causes little or no pain. The tube often comes out on its own after a few months.
- There are generally few problems with ear tubes. However, sometimes fluid continues despite tube placement. or the tube comes out too soon to be helpful. At other times, the tube may leave a hole in the eardrum, which may need to be repaired at a later time.

When should I call your office?

Call our office if:

- Your doctor recommends "watching and waiting." Be sure to keep follow-up appointments.
- Your child has an ear tube. Keep regular follow-up visits with the ENT doctor and with our office. The ENT doctor will provide more details about caring for the ear tube.
- You see fluid draining from the ear after an ear tube is placed. Call the ENT doctor or our office.