

Ear infection (otitis media)

What is otitis media?

Otitis media is an infection of the middle ear, which consists of the ear drum and the small cavity behind it which is normally filled with air. The cavity is connected to the back of the nose by the Eustachian tube.

What is the cause of otitis media?

It usually develops suddenly in association with an infection of the nose and throat region such as the common cold. It is then called acute otitis media. The infection may be either due to viruses or bacteria which enter the middle ear cavity and infect the mucus that collects because of swollen and blocked air passages. Sometimes the infection can enter through a ruptured ear drum. Pus will form in the middle ear if the infection is bacterial.

Who gets acute otitis media?

Any person of any age group can get it but it is most common in children. Almost one in 30 people get it.

What are the symptoms?

Some people particularly children can feel very sick with fever, irritability, headache, nausea and (sometimes) vomiting. Children tend to pull at their ears. Common symptoms include:

- fullness in the ear/blocked ear
- earache (absent in some)
- pain which may be stabbing and severe
- dulled hearing for a few days
- discharge from ear—if eardrum perforates (with relief of pain).

Your doctor will examine the ear, particularly the drum, using an otoscope to assess the nature of the infection.

What are the risks (complications)?

If the infection is viral the risks are minimal. Complications are usually associated with delayed treatment of bacterial infection.

- Acute mastoiditis—spread of infection to the mastoid bone's air cells
- Chronic otitis media—lingering infection
- Serous otitis media (glue ear)—in children
- Perforated ear drum
- Middle ear effusion
- Hearing loss

What is the treatment?

Some bouts of otitis media may settle well within 2 to 3 days with simple treatment measures such as treating an associated cold with decongestants, inhalations and/or antihistamines.

General measures

- Analgesics to relieve pain
- Adequate rest in a warm room
- Decongestant medication to relieve upper respiratory congestion
- Topical nasal decongestants for a few days only if nasal blockage

Children are usually treated differently to adults. With appropriate treatment most children with acute otitis media are much improved within 48 hours.

Analgesics

Children should be given regular doses of paracetamol. Adults should take paracetamol, aspirin or ibuprofen for pain.

Antibiotics

Doctors are careful with the use of antibiotics but they will usually be prescribed if the infection is obviously caused by bacteria, otherwise a 'wait and see' approach can be adopted while analgesics and decongestants are used. If required, antibiotics are given for 5 to 7 days or until all signs of infection have gone.

Other measures

Surgical drainage is another measure. If the eardrum is bulging with pus the doctor may create a small cut in it with a thin scalpel to relieve the pressure and allow free drainage of pus. This is done under general anaesthetic. The eardrum then heals well in 1 to 2 weeks.

Follow-up

The ear, including the ear drum, is assessed. Hearing is tested, preferably with an audiometer.

