

PATIENT INFORMATION: EAR INFECTIONS and GLUE EAR

Ear infections are very common in young children. The infection sometimes involves the outer ear (otitis externa) but more frequently involves the middle ear (otitis media). Ear infections cause pain and irritability but are not usually serious.

Middle ear infections

The normal ear is usually filled with air. The Eustachian tube connects the middle ear to the throat and helps to equalise the pressure between the outer and middle ear. If the Eustachian tube is not working properly fluid does not drain normally from the middle ear and bacteria and viruses from the throat may cause infection in the middle ear. Often malfunction of the Eustachian tubes is related to a cold. Young children get more middle ear infections because infection develops more easily when the tubes are smaller. It is not uncommon for small children to have several ear infections in one year but the frequency and severity of these infections tends to decrease as children get older.

Drawing of ear



Acute middle ear infection

In an acute middle ear infection (acute otitis media) the eardrum becomes inflamed and fluid builds up behind it causing intense pain. There may be a fever and hearing loss. Occasionally the bulging eardrum tears and there is a thick discharge from the ear. Often the pain improves when this happens and the tear in the eardrum heals without treatment. More frequently the middle ear fluid slowly resolves by itself over weeks or months.

Acute otitis media



Glue ear

In some children the fluid behind the eardrum persists for longer than 3 months after the acute infection or keeps recurring, this is known as glue ear or otitis media with effusion. It may cause pressure in the ear and difficulty sleeping, irritability, hearing or balance problems.



Outer ear infection

Infection in the outer ear (otitis externa) is caused by excessive moisture in the canal (Swimmer's ear) or trauma to the canal (eg from cleaning with ear buds). This can cause pain when touching the ear, ear redness, swelling, discharge and fever.

When to see a doctor

Take your child to your GP if you think they may have an ear infection.

Middle ear infection can spread to the area immediately behind the ear. If there is pain, redness or swelling in this region then take your child to your GP or local A & E.

A hearing test should be performed if your child has frequent ear infections or possible hearing difficulties. This test is performed by an audiologist. Your GP may also refer your child to an ear, nose or throat (ENT) specialist.

Treatment

If your child has a **middle ear infection**, the best treatment depends on many factors, including your child's age and the severity of symptoms. Paracetamol or ibuprofen may be used to treat pain. Antibiotics are not routinely used to treat middle ear infections as the infection is frequently caused by viruses which do not respond to antibiotics. Your GP may prescribe antibiotics in very young or unwell children.

Glue ear often doesn't cause symptoms and usually clears on its own, however sometimes it requires surgery. If the fluid persists and is affecting your child's hearing then your GP will refer you to an ENT surgeon. Insertion of ventilation tubes or grommets into the eardrum may be indicated to drain the middle ear fluid. This prevents the fluid from reaccumulating and restores hearing. The grommets usually fall out on their own after 6-12 months, larger grommets may remain for longer.

Grommet insertion is a quick procedure, performed in a hospital under a very short anaesthetic. The stay in hospital generally takes about three hours and the child is usually back to normal activities the next day. There may be some seepage of fluid from the ear for several days. The surgeon may give you some topical antibiotic drops to put in the ear canal following the procedure. These antibiotic drops should not be used for more than 5 days.

Your ENT surgeon may also recommend removal of the adenoids. This is lymph tissue in the area above the soft roof of the mouth which may become infected or enlarged.



Picture of grommet in place on ear drum

Outer ear infections (Otitis Externa)

Outer ear infections are treated with antibiotic or antifungal ear drops. A common reason for outer ear infection is secondary to grommets (ventilation tubes for OME) or perforation. Some outer ear infection is due to poor ear hygiene, swimming in infected pools or spa, excessive use of antibiotic drops or in some elderly with poorly controlled diabetes. Dry mopping with tissue paper spear or careful cotton bud is important before placing ear drops. After putting in the ear drops keep the child/adult lying with the affected ear facing the ceiling for several minutes to allow the drops to be absorbed. Avoid swimming for one week after treatment to give the ear time to heal. Ear suction by an expert may speed up clearance of your ear infection. (Photos next page)

