information

Glue Ear and Ear Infections

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Glue Ear

This has many other names including Otitis Media with Effusion (OME), or Serous Otitis Media.

With this condition, fluid is trapped behind the ear drum in the middle ear. There is no associated fever and the eardrum is not red and angry, and usually is not bulging. If these features were present then that person would be suffering from an acute ear infection (Acute Otitis Media). Glue Ear can also lead to alterations in the structure of the eardrum where it becomes retracted or sucked inwards.

What are the Symptoms of Glue Ear?

Sometimes children can complain of ear pain, especially when they lie down.

Sometimes children can have hearing loss, and there can be associated delay in speech and language development.

Sometimes balance can be affected.

Sometimes Glue Ear can go unnoticed with very few symptoms.

Ear Infections

This is also known as Acute Otitis Media.

With this condition, the middle ear space behind the ear drum contains an infection. This results in fluid and pus filling the middle ear space, which in turn results in fever, ear pain, and a bulging red ear drum.

What are the Symptoms of Acute Otitis Media?

Children usually have fever, severe ear pain, waking at night in pain, and decreased hearing. Sometimes balance can be affected.

If the eardrum bursts, discoloured fluid is often seen coming out of the ear canal. Pain usually improves when this has occurred.

In rare cases the ear infection can progress to involve the bone behind the ear (Mastoiditis). This condition requires urgent specialist review.

Why do Children develop Ear Problems?

There are two main factors – Immaturity of the Eustachian Tube, and Infection.

The Eustachian Tube is the tube that connects the back of the nose upwards to the middle ear. It is responsible for ventilating the middle ear and draining any fluid and mucous that collects in the middle ear to the back of the nose, where it is then swallowed.

In children, the Eustachian tube is shorter and flatter. As a result, it is easy for fluid and mucous (and infection) to travel up the Eustachian tube to the middle ear. As children get older, their Eustachian tube “matures” and tends to be less prone to problems.

In addition, infection can cause the opening and the lining of the Eustachian tube to swell and therefore block, which means that fluid and infective organisms are unable to be drained from the middle ear.

There are other factors that may make it more likely for a child to develop ear problems. They include:

- Any situation that exposes the child to other large groups of children, such as child care or preschool, or large families
- A family history of ear problems
- Immune deficiencies
- A cleft palate
- Infection of the adenoids
- Early bottle feeding (breast feeding is a protective factor)
- Passive cigarette smoking
- Allergies (a weaker factor)

Treatment

Acute ear infections are treated with analgesics such as Paracetamol. In most cases antibiotics are also prescribed. In some cases, your GP may choose to hold antibiotics for 24-48 hours to see if there is spontaneous recovery, but this should only be done if the child is older than 2 years of age and a further ear examination can be done by your GP after 24-48 hours.

If there are repeated ear infections, insertion of grommets into the eardrums can be useful for treatment. Exactly how many ear infections are required before proceeding with this operation depends on the individual case. But as a general guide grommets are considered once a child has suffered from at least 3 ear infections in 6 months or 4 ear infections in 12 months.

A prolonged course (4-6 weeks) of a low-dose antibiotic has been used in the past as a treatment for recurrent ear infections. However this has largely fallen out of favour because infections tend to recur once the course of antibiotic has finished, antibiotics can have adverse effects, and finally there are concerns that this treatment regime may breed resistant bacteria.

With regard to Glue Ear, 80-90% of cases spontaneously resolve after 3 months. If the fluid persists beyond 3 months and is associated with a hearing loss, then grommets are the recommended treatment.

If there are concerns about structural change affecting the eardrum, grommets may also be recommended.

Oral decongestants, antihistamines, steroids, and/or nasal sprays have no role to play in the treatment of Glue Ear or Acute Ear Infections.