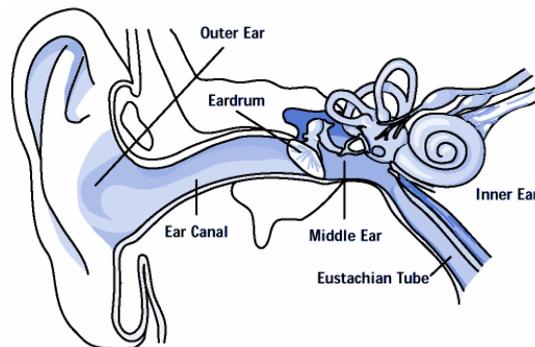


## Recurrent Ear Infections and Glue Ear in Children.

The ear is made up of three distinct parts; the outer ear which is the part you can see and extending into the ear drum, the middle ear which is on the other side of the ear drum and the inner ear which is deep within the temporal bone and contains the parts of the ear which control hearing and balance. Ear infections are the most common illness to affect pre-school children with up to 90% of children experiencing one before their 3<sup>rd</sup> birthday. When an ear infection occurs it is the middle ear which is affected. For most children, an ear infection will not be a concern, but for others it will be a recurring experience for them and they may also go on to develop Glue Ear as a result.

Glue Ear is essentially fluid behind the eardrum. This fluid may become thick and cause pain and a reduction in the child's hearing. Imagine hearing everything with your fingers in your ears! That is what it sounds like for a child with Glue Ear. The middle ear is connected to the back of the nasal passages by a small tube called the Eustachian Tube. This tube is short and narrow and not yet fully vertical in babies and therefore not so effective. The Eustachian Tube allows us to equalise the pressure on either side of the ear drum - like when your ears go pop in a plane. Babies do this by crying, swallowing and yawning. This tube also drains any excess fluid from the middle ear thereby maintaining a healthy environment in the ear. However, when a child is susceptible to coughs, colds and ear infections this tube becomes inflamed and as a result blocked with mucus. This in turn decreases the pressure inside the eardrum and gives the child the sensation his ear needs to pop. This negative pressure in the middle ear causes nasal mucus to be drawn up the tube into the middle ear and the problem continues.



The Ear.

There are certain conditions that raise the risk of ear infections and glue ear.

- Being under 3 years of age or being a boy.
- Going to nursery. Children in day-care have more contact with other children and as a result are more likely to catch infections.
- Bottlefed babies. Breastmilk increases the baby's immune system and seems to protect against glue ear.
- Being near second-hand smoke. Children with a parent who smokes are 50% more likely to get ear infections and 40% more likely to get Glue Ear.
- Being in a large family or having a family history of glue ear.

- Using a soother. Children diagnosed with an ear infection have almost double the risk of recurrent infections if they use a soother.
- Having recurrent coughs and colds and babies who are constantly chesty.

Signs and symptoms of an Ear Infection include high temperature, pain and irritability. In most cases this will be a once off event which can be treated successfully with antibiotics by the GP. In some cases the ear infection does not clear up completely and this may lead to fluid developing in the middle ear. This in turn will progress on to another ear infection which exacerbates the problem by increasing the inflammation in the Eustachian Tube. Small children may not be able to tell you they have pain and may be seen tugging at their ears. Children with symptoms of an ear infection should always be seen by their GP.

The middle ear space should be full of air so that sound waves may be passed through to the inner ear effectively. If there is fluid in the middle ear the child's hearing may be affected and you may notice some irritability as a result. Their speech may also be affected as they are not hearing the sounds as they should. The sooner Glue Ear is diagnosed and treated the better.

As a Cranial Osteopath I treat children with recurrent ear infections and Glue ear frequently. First of all I examine the available movement in their Temporal Bones; these are the bones at the side of the skull in which the ear is located. I observe the position of the Temporal bones compared to each other and compared to the Occipital Bone at the back of the skull. Asymmetry of the ears is often associated with asymmetry of the skull. Flat headedness in babies may affect the movement of the ear bones and the adjacent bones of the skull. Babies who have had a forceps delivery are more likely to have increased tension in the Temporal Bones due to the pressure applied to these bones during delivery. By reducing the tension in the Temporal bones the function of the Eustachian Tube is improved and this in turn helps fluid to drain from the Middle Ear. I also examine upper rib cage movement and the tension in the muscles that connect the ribs to the ear bone surfaces, as many ear infections originate in the Upper Respiratory Tract as a result of coughs and colds.

Successful treatment must also include the GP as ear infections may continue to occur occasionally. The fluid in the middle ear is thick and mucous and can take time to drain. However over time, the ear infections become less frequent and the Glue Ear begins to resolve. As children get older they are less likely to get ear infections as the Eustachian Tube grows and widens.

For more information on the benefits of Cranial Osteopathy please contact Frank Kelleher, Cranial Osteopath for Babies and Children at [Touchstone Osteopathy at Blackrock Hall Primary Care Centre](#). Tel; [021 4231166](tel:0214231166) or Email; [frank.kelleher@blackrockhall.ie](mailto:frank.kelleher@blackrockhall.ie)