

Otitis Media with Effusion

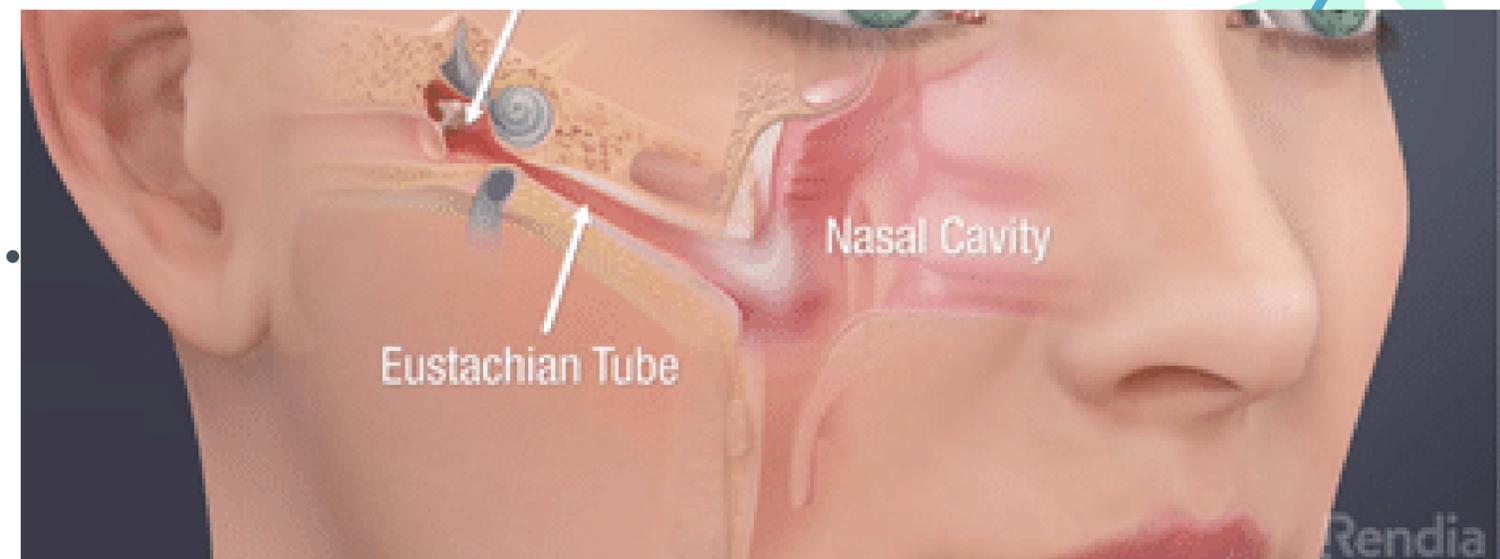
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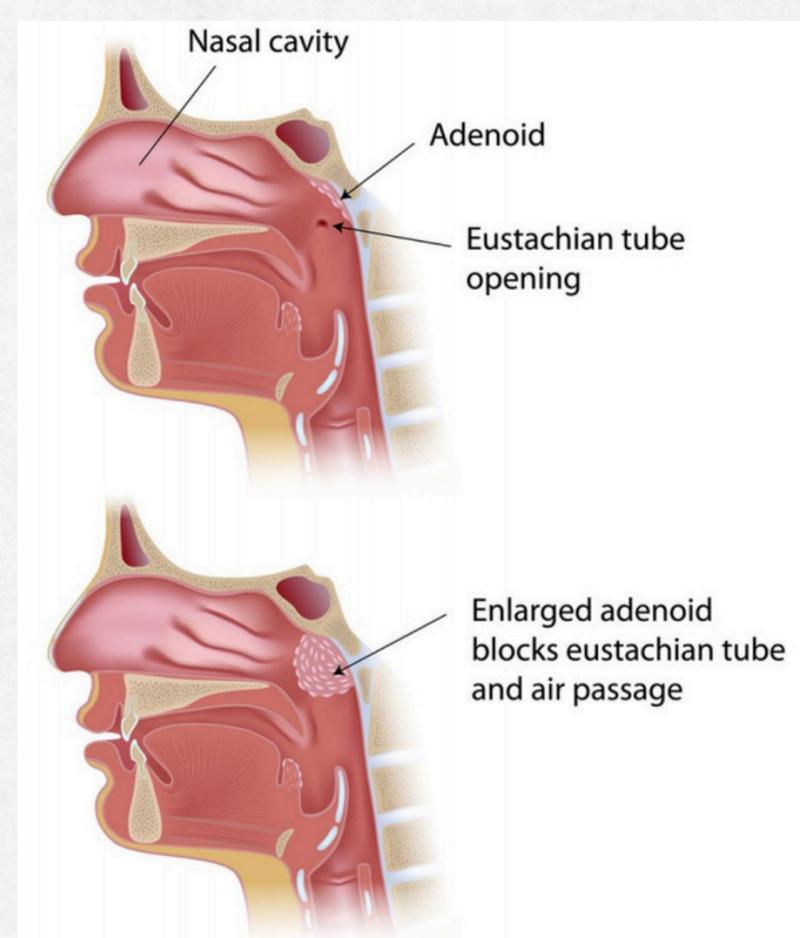
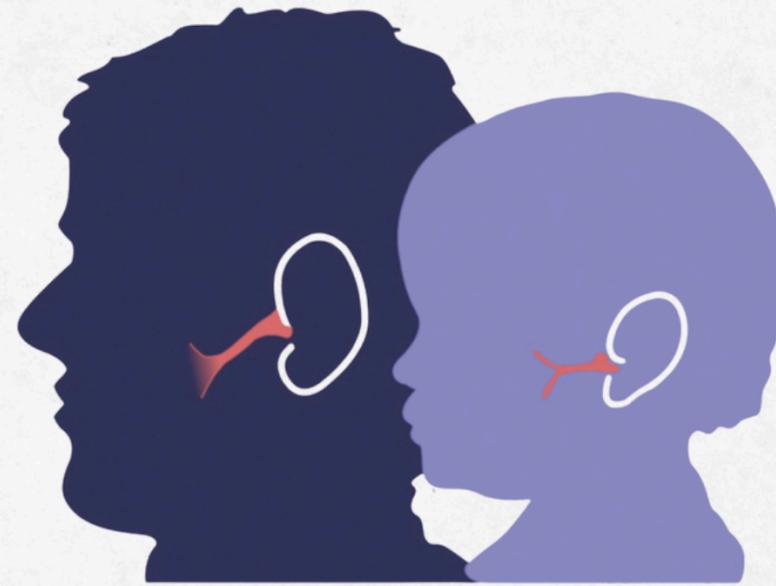
- **Otitis media with effusion (OME), secretory otitis media** or '**glue ear**', The condition is due to the accumulation of non-infected fluid, either serous or viscous, within the middle-ear cleft, resulting in conductive deafness.
- It is commonest in small children (6 months- 3 years) and those of primary school age and may cause significant deafness.
- It occurs in adults, usually as a serous effusion and may rarely be a sign of nasopharyngeal malignancy.
- **Self-limited** , takes 4-6 weeks to resolve .



CAUSES

1- Nasopharyngeal obstruction :

e.g. large adenoids(mc cause in children) or tumor resulting in Eustachian tube dysfunction.



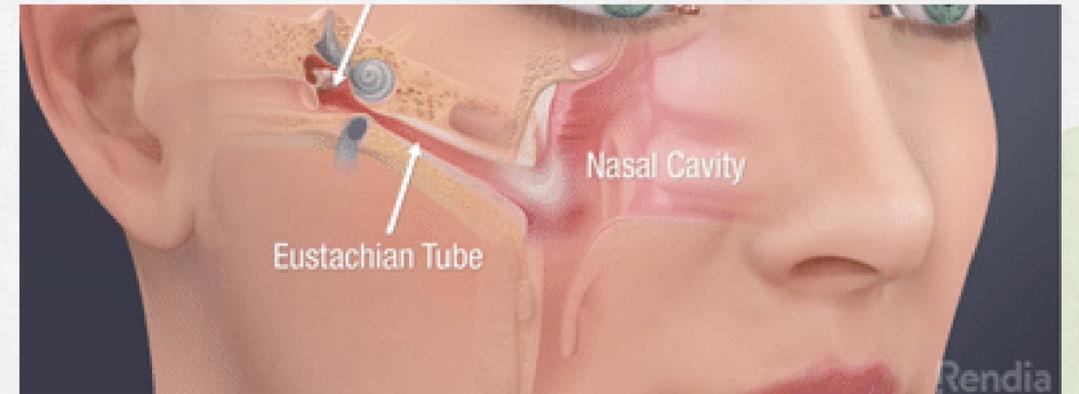
2- Untreated Acute otitis media, , will often give rise to a spontaneous perforation and drainage of the middle ear.

3- Upper respiratory tract infection .

4-OME is commoner in winter months.

5-Allergic rhinitis and GERD.

6-Parental smoking has been shown to predispose to OME in children.



SYMPTOMS

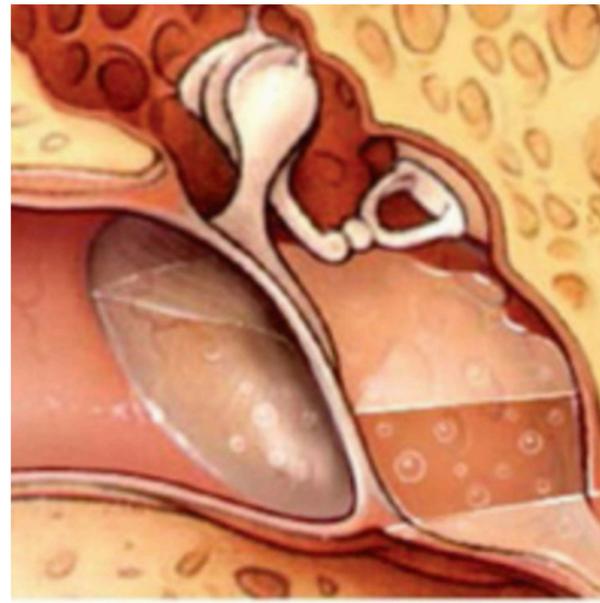
- **Not all children with OME have symptoms, painless.**
- **Symptoms are often mild or minimal. They can vary based on the child's age.**
- **Deafness may be the only symptom.**
- **Discomfort in the ear —rarely severe.**
- **Occasionally, tinnitus or unsteadiness.**
- **It may be responsible for developmental and educational impairment (delayed speech development) , and if untreated may result in permanent middle-ear changes.**

- **Fluid in the middle ear —a variable appearance that may be difficult to recognize. Dark blue or grey color of tympanic membrane.**
- **Yellow/orange tinge to tympanic membrane.**
- **Dull appearance with radial vessels visible on the tympanic membrane and handle of the malleus.**



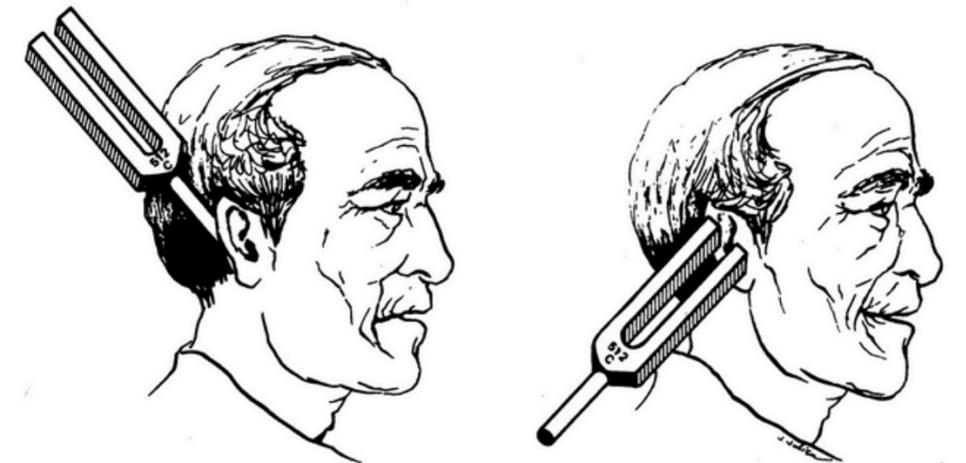
- Retraction of the tympanic membrane.

- Hair lines or bubbles —rarely seen.



Hair line

- Tuning fork tests show conductive deafness, i.e. bone conduction > air conduction.

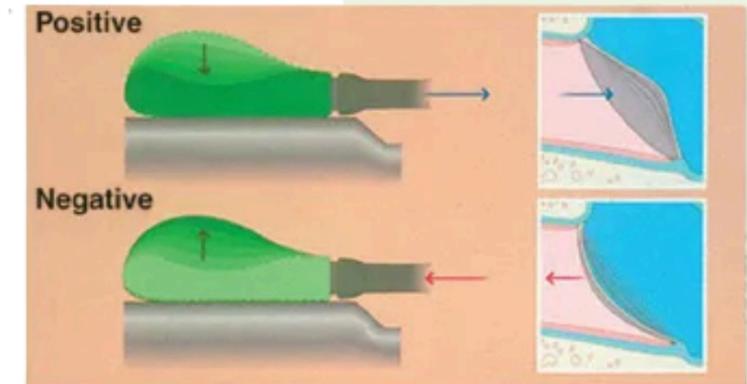
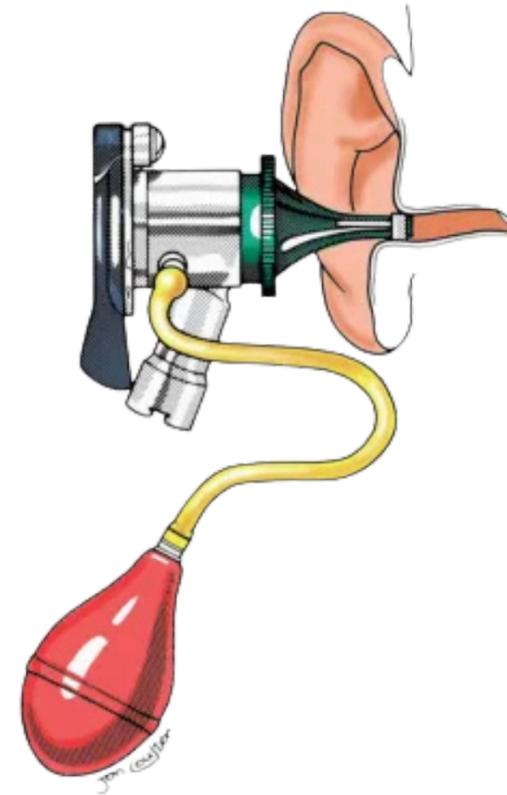


I-Pneumatic otoscopy: Primary diagnostic method

Using an otoscope.

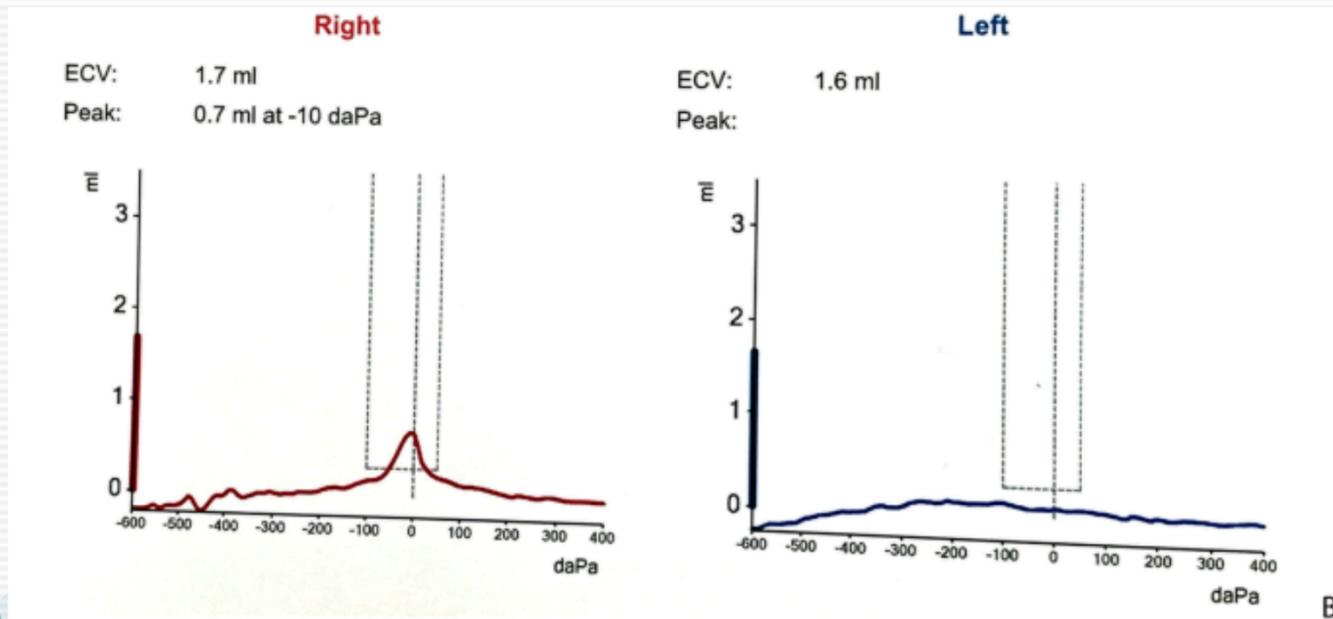
The doctor will be looking for:

- Air bubbles on the tympanic membrane surface.
- A tympanic membrane that appear dull instead of smooth and shiny.
- Visible fluid behind the tympanic membrane.
- A tympanic membrane that does not move when a small amount of air is blown into it.



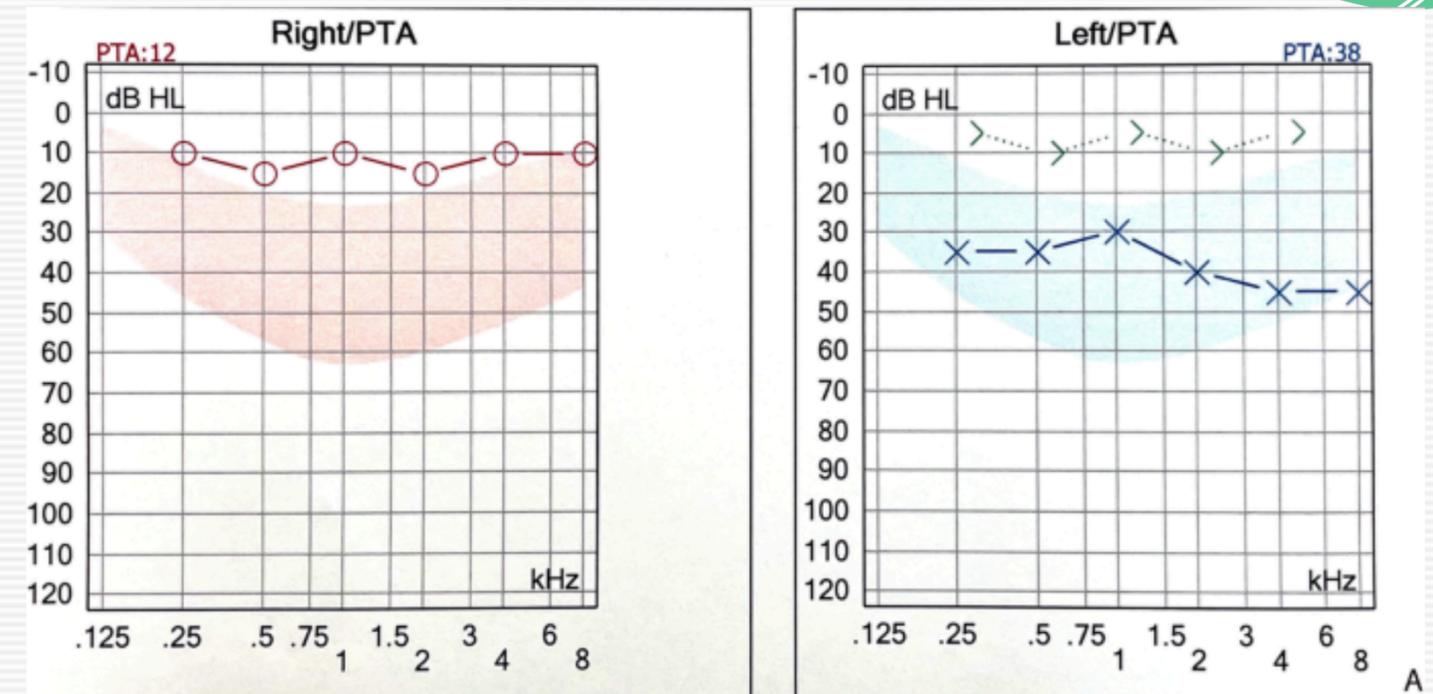
2- Tympanometry:

- Flat, type B tympanogram, with normal volume.



3- Audiometry:

- Unilateral conductive hearing loss.
- to know if become sensorineural HL.



IN CHILDREN

1. Many cases will resolve **spontaneously**, and the child should usually be observed for 3 months before embarking on surgery.
2. The use of **antihistamines** and mucolytics is of no proven benefit.

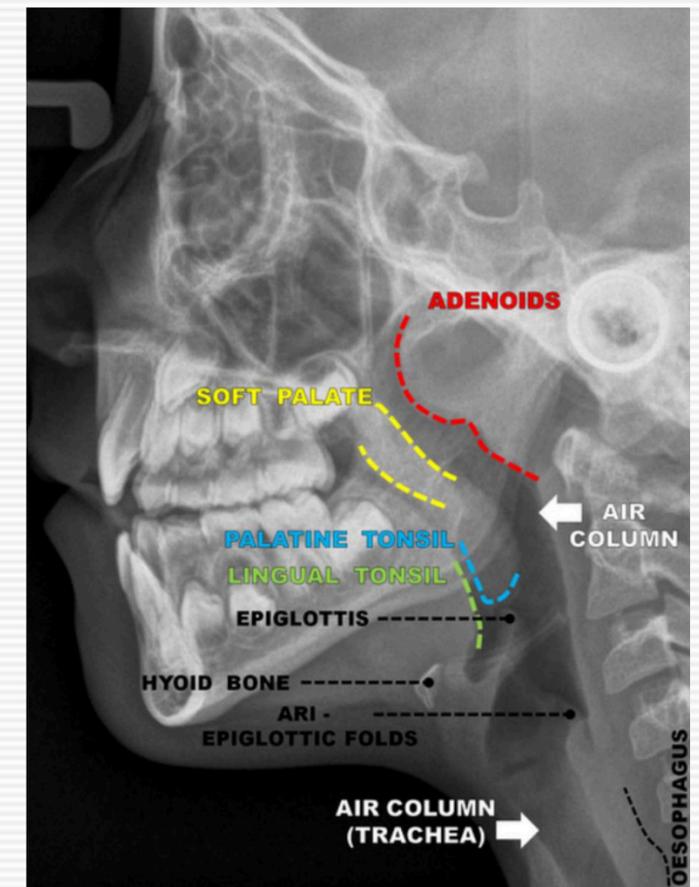
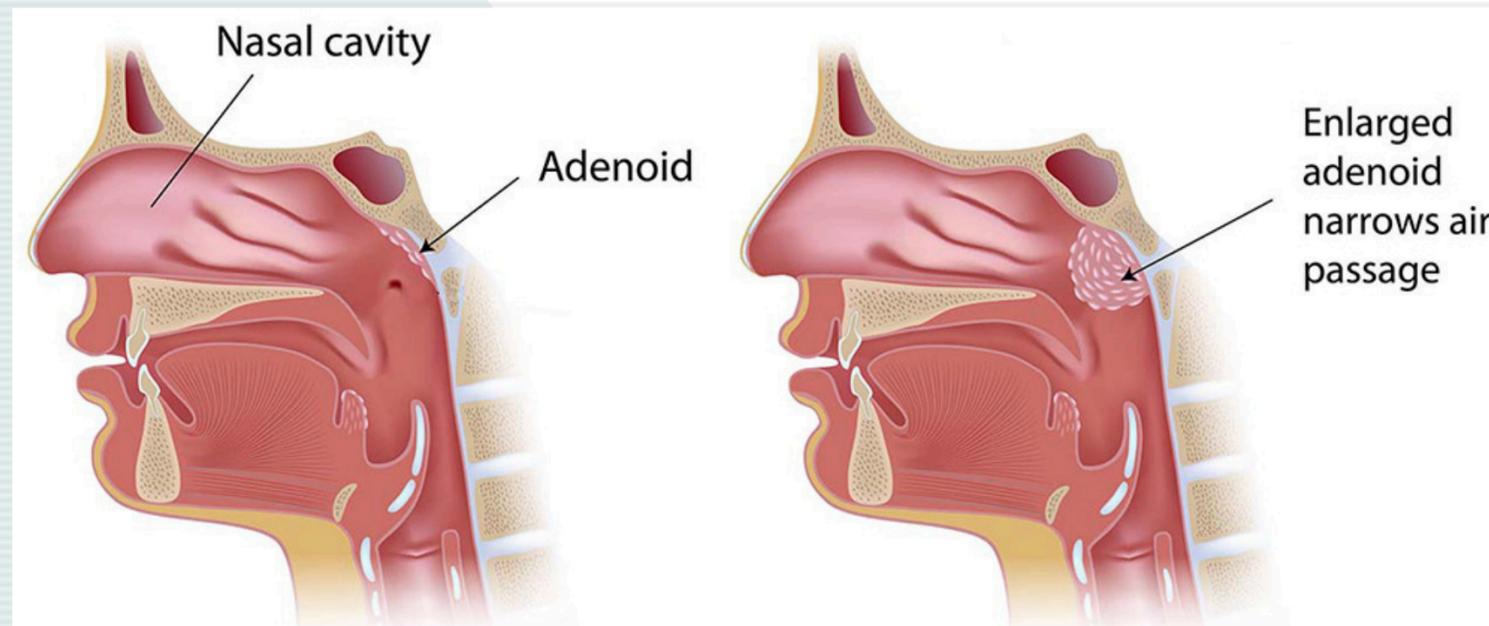
Antibiotic therapy may help in the short term.

Surgery is indicated if hearing loss persists for 3 months or if there is recurring pain.

3. **Surgical** treatment.

ADENOIDECTOMY

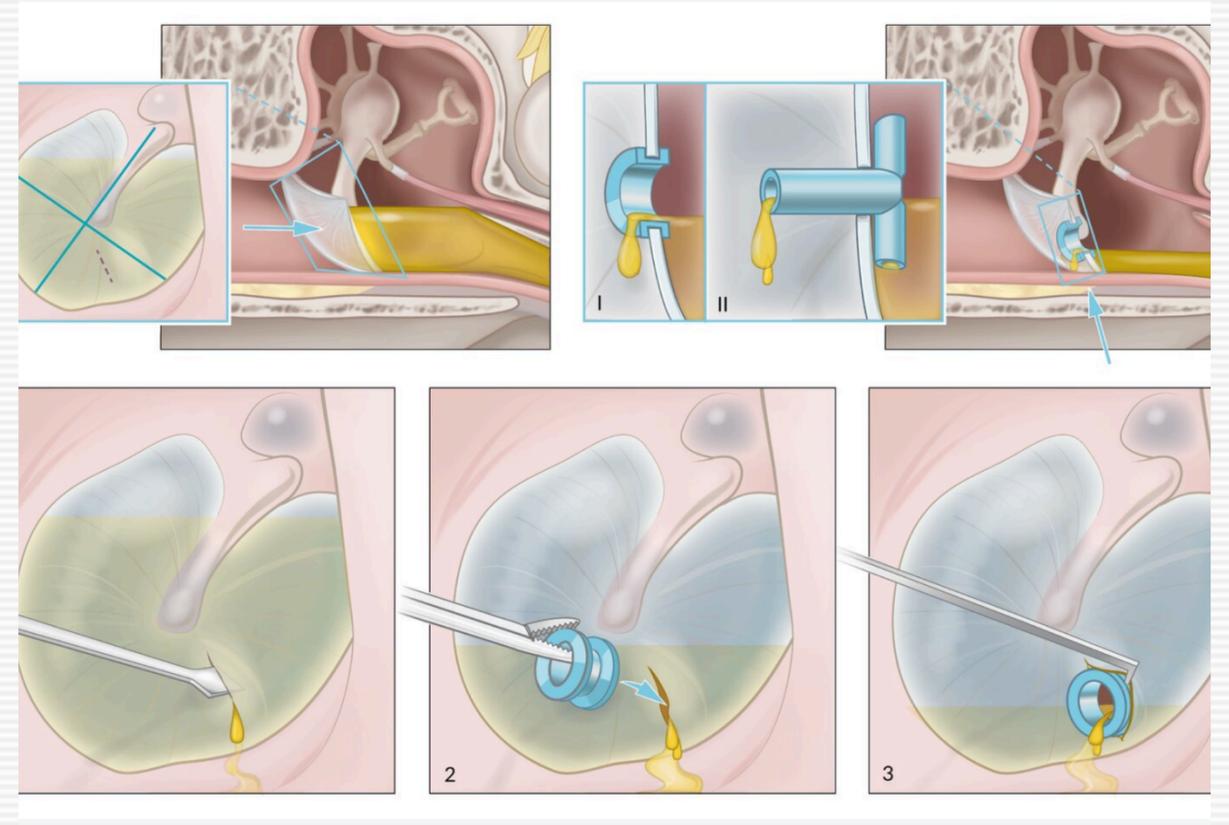
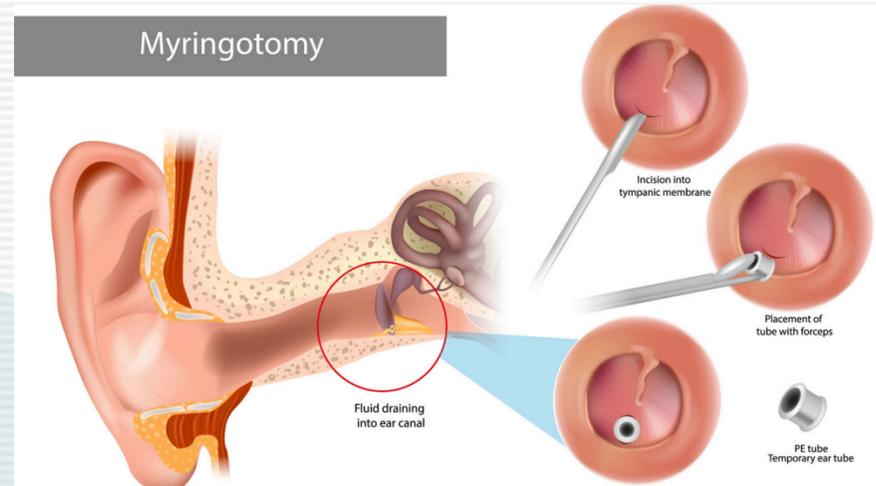
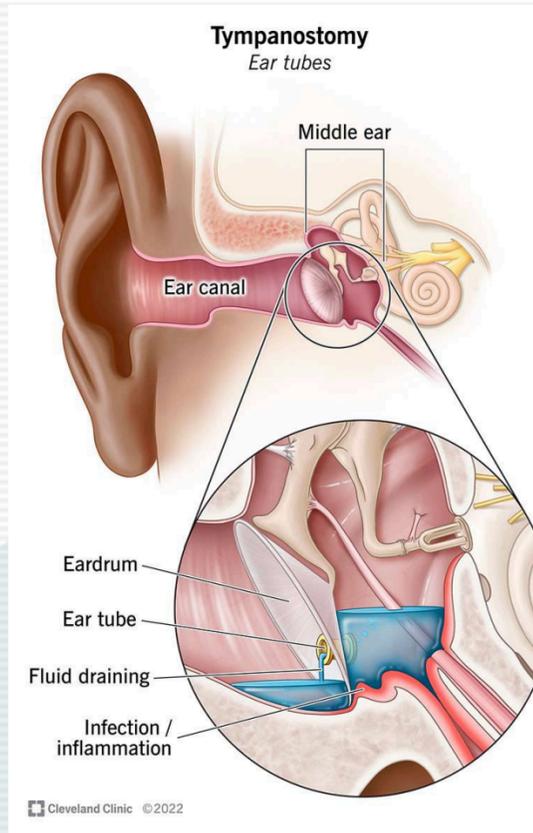
- It has been shown that adenoidectomy is beneficial in the long-term resolution of **OME**.
- The maximum benefit occurs between the ages of 4 and 8 years.



Post nasal X-ray
Lateral nasopharynx Xray

Myringotomy and grommet insertion

- Under general anaesthetic, the tympanic membrane is incised antero-inferiorly.
- The glue is aspirated and a grommet inserted into the incision.
- The function of the grommet is to ventilate the middle ear and to drain the fluid.



IN ADULTS

- Examination of the nasopharynx to **exclude tumour** is essential, especially if the effusion is unilateral.
- Under the same anaesthetic, a grommet may be inserted.
- Secretory otitis media in adults not due to tumour usually follows a cold. Resolution is usually spontaneous, but may take up to 6 weeks.

Complications and Long-Term Effects

If OME is associated with frequent ear infections, more complications can occur.

These can include:

- **Acute ear infections .**
- **Cysts in the middle ear .**
- **Eardrum scarring .**
- **Damage to the ear that causes hearing loss .**
- **Affected speech or language delay .**



﴿وَاللَّهُ أَخْرَجَكُمْ مِنْ بُطُونِ أُمَّهَاتِكُمْ لَا تَعْلَمُونَ شَيْئًا
وَجَعَلَ لَكُمْ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ لَعَلَّكُمْ تَشْكُرُونَ﴾

