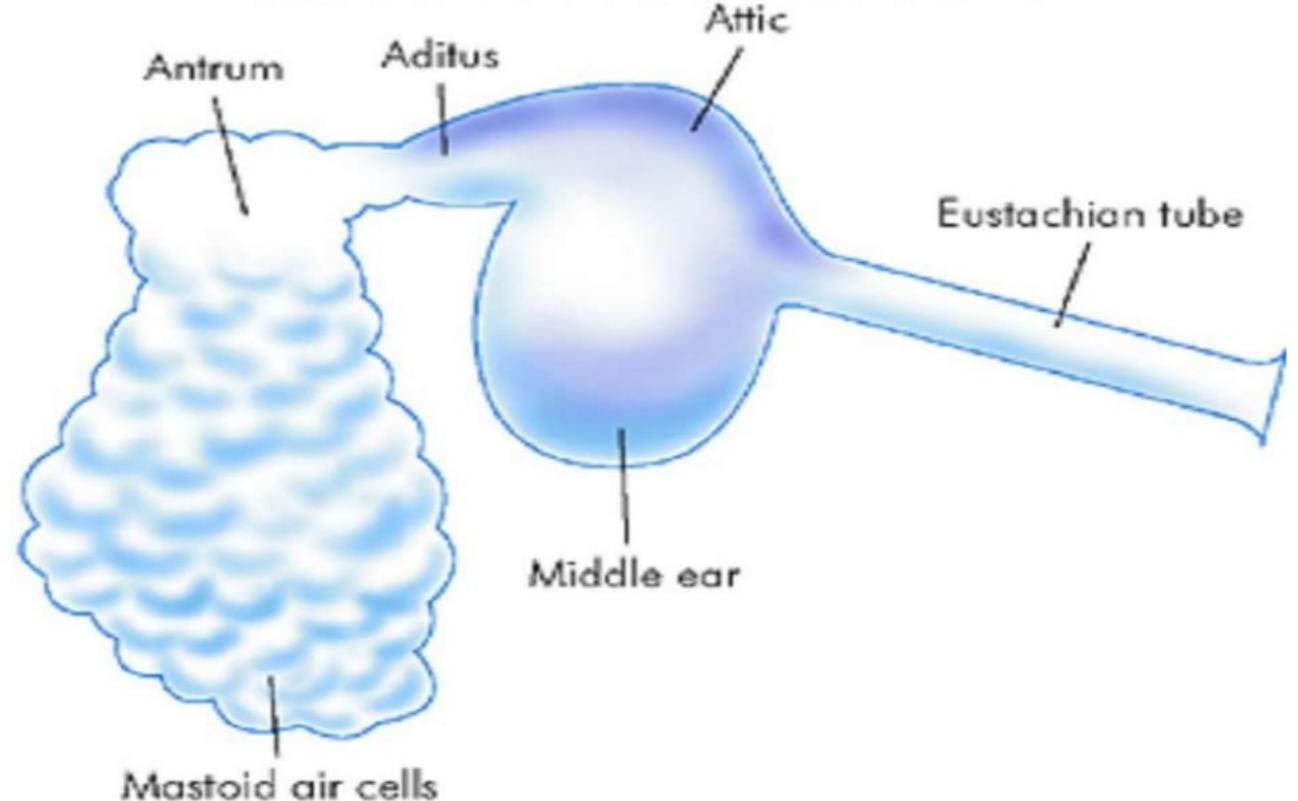
### **CSOM**

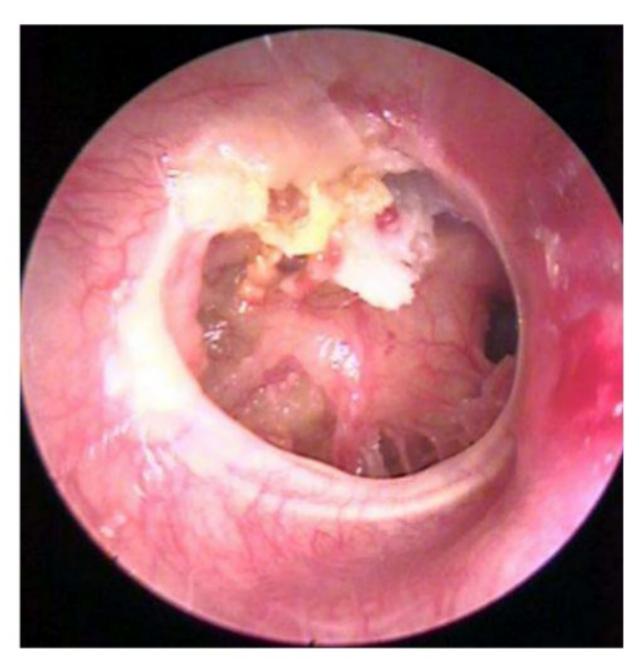
#### PREPARED BY Dr.JUSTIN JEYA AMUTHA

# MIDDLE EAR CLEFT

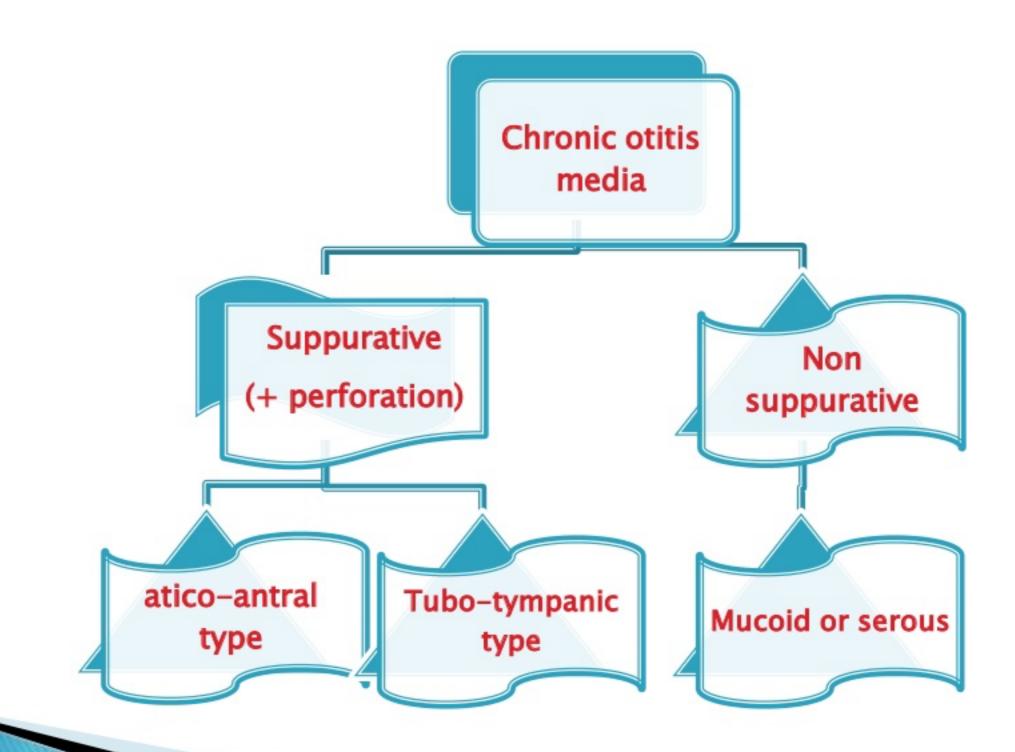


#### **DEFINITION OF CSOM**

 Chronic suppurative otitis media is a long standing infection of a part or whole of the **middle ear cleft** characterised by continuous or intermittent **discharge** through a persistent tympanic membrane perforation.



### Classification:-



### 1.Suppurative(+ perforation)

a.Atico-antral chronic otitis media -

Inflammation involves bones (e.g. mastoid, tympanic ring, ossicles ).

b. Tubo-tympanic otitis media-

Acute otitis media → permanent perforation → muco-purulent discharge.

### **AETIOLOGY**

- Sequelae of acute otitis media
- Ascending infections via the eustachian tube
- Nasal Allergy
- GERD
- Cranio facial abnormalities
- Autoimmune disease





### Etilogy:-

- Inappropriate treatment of acute otitis media.
- URTI, Allergic rhinitis.
- Breastfeeding and long time group child care
- Eustachian tube deformity
- Septal deviation, cleft palate, sinusitis

### 2.Non suppurative-

#### a.Serous Otitis media-

#### Stages:

URTI or acute otitis media-> Fluid collection in middle ear and obstruction of eutachian tube → tympanic membrane retraction.

Fluid become pus like → necrosis → tympanic membrane perforation.

Could end up with mastoiditis (if not stopped).

## SIGNS

- Profuse mucopurulent discharge, non foul smelling, not blood stained.
- Hearing loss.
- Central Perforation.
- Middle ear mucosa congested.
- Polyp
- Ossicular chain erosion.
- Tympanosclerosis

### TYPES OF PERFORATION

### CENTRAL PERFORATION:

 Perforation in the pars tensa sorrounded all around by pars tensa

### MARGINAL PERFORATION:

 Perforation in the pars tensa surrounded partly by pars tensa and partly by bone

#### **ATTIC PERFORATION:**

Perforation in the pars flaccida





STAGES	FEATURES
ACTIVE STAGE	Discharging at the time of examination.
QUIESCENT STAGE	In the recent past, discharge present but there is no discharge now.
INACTIVE STAGE	No discharge for 3- 6 months. Dry ear.
HEALED STAGE	TM Perforation has healed. Permanently controlled middle ear infection.

### DIAGNOSTIC EVALUATION

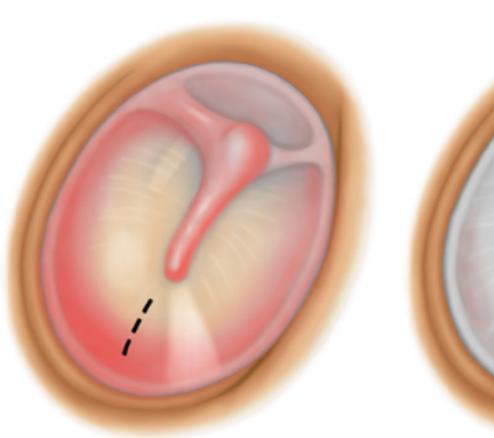
- History collection
- Physical examination
- Blood investigation
- Chest X-ray
- Pneumatic Otoscopy: standard tool for diagnosis
- Impedance Tympanometry: Measures the resonance of the ear canal for a fixed sound as the air pressure is varied.
- Spectral Gradient Acoustic Reflectometry: measures the condition of the middle ear by assessing the response of the TM to a sound stimulus. Equivalent to tympanometry for middle ear effusions



- Amoxicillin: 20-40 mg/kg/day tid for 10-14 days or,
- Augmentin: 45 mg/kg/day po bid for 10-14 days
- Auralgan: analgesic/adjunct for ear pain 2-4 drops tid
- 80% will resolve within 3 days without treatment, 95% in 5 days

### 2<sup>nd</sup> Line Treatment Regimen

- Cefzil
- Pediazole ( erythromycin/sulfisoxazole)
- Bactrim (trimethoprim/sulfamethoxazole
- These medications are used as secondary agents if the primary antibiotic has failed after 10 days and the symptoms persists.

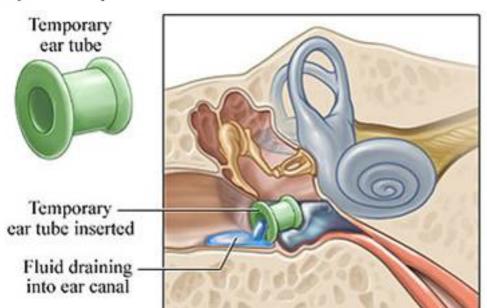








Small cut made in eardrum for tympanostomy tube

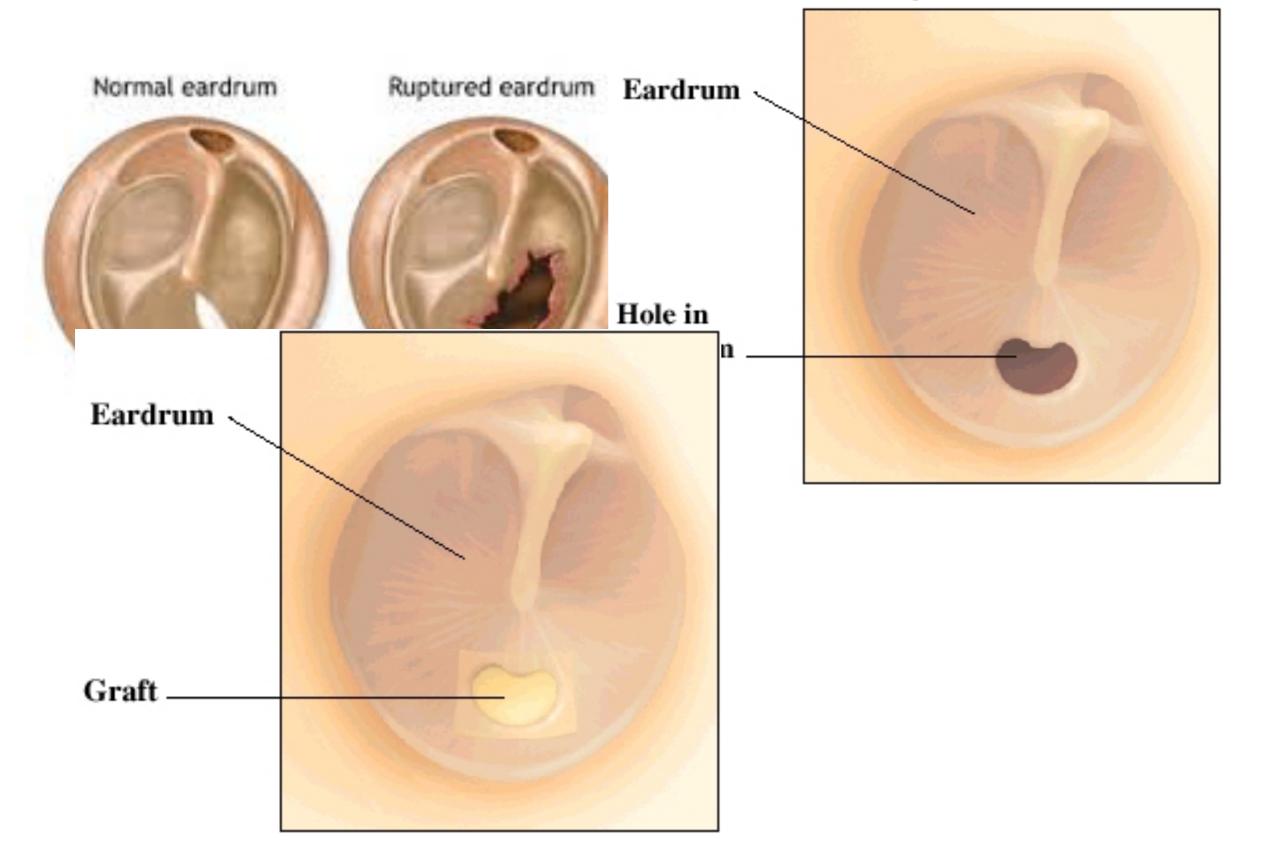


Fluid from middle ear drains from tube

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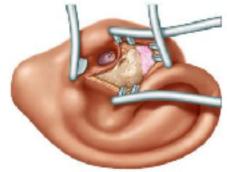
## Tympanoplasty

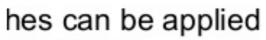






## anoplasty

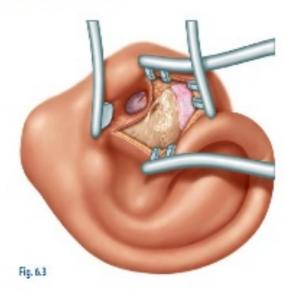




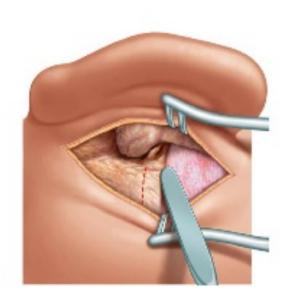
in Cartilage tympanoplasty



Transmeatal or transcanal

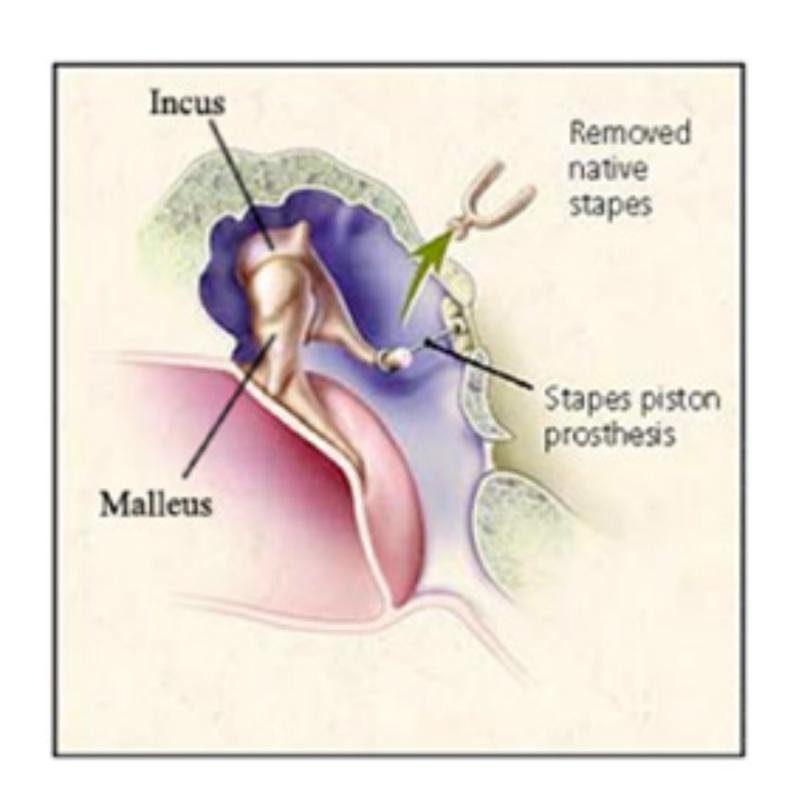


endaural



retroauricular

### Ossiculoplasty



## Mastoidectomy

