Sequelae Of ASOM

- Healing
- Open perforation
- Residual deafness
- CSOM

Today's topics-

Chronic suppurative Otitis Media (CSOM)

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Chronic Suppurative Otitis Media

Definition:

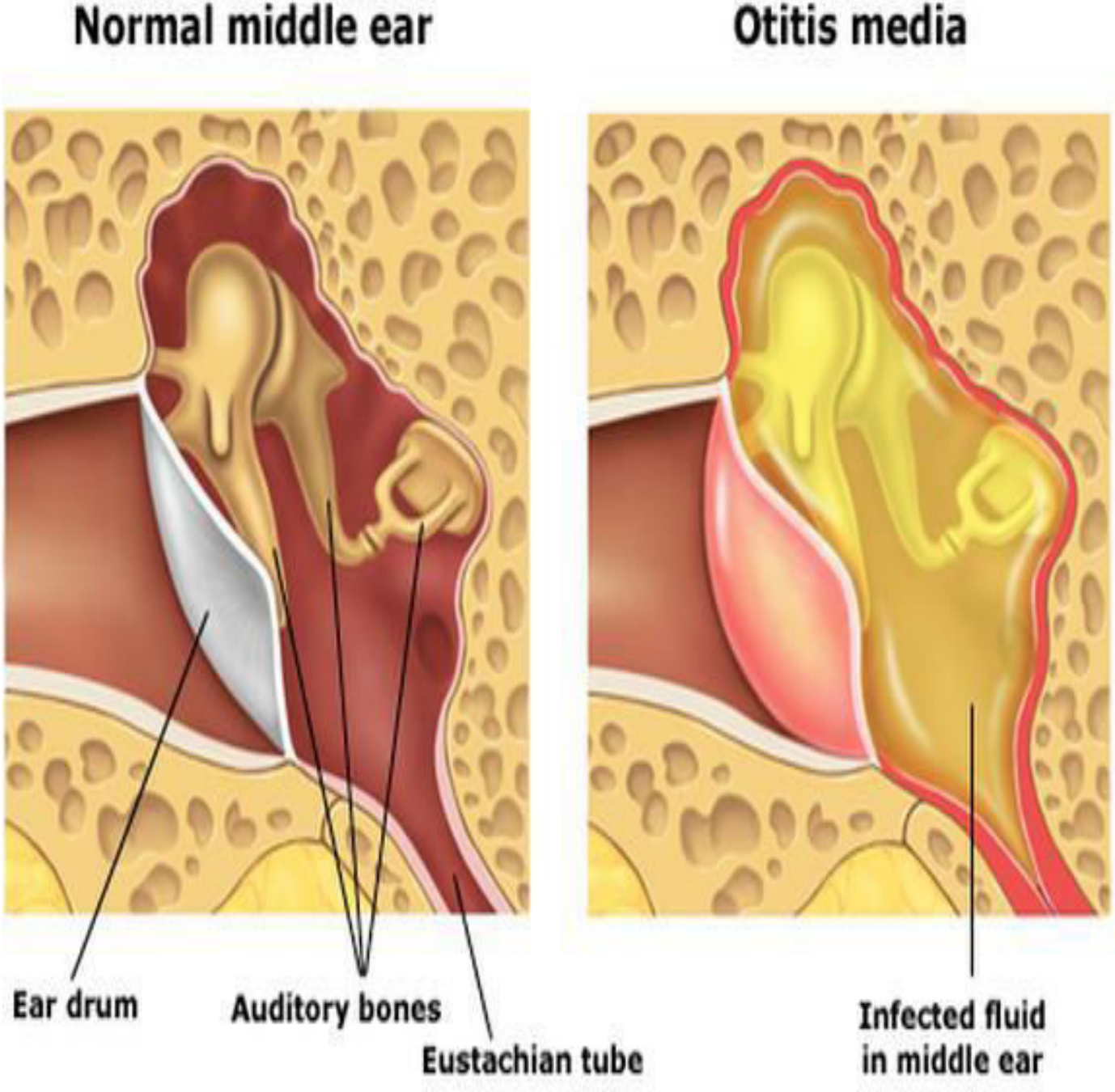
Chronic inflammation of the mucoperiosteal lining of middle ear cleft by pyogenic organism.

Aetiology:

- Sequelae of ASOM due to
  - Inadequate treatment of ASOM
  - Virulence of organism
  - Immunosuppressed Patient
- Repeated entry of infection through perforation in middle ear (dirty water)

Aetiology (Cont.)

- Repeated infection of RT reaching middle ear through Eust. tube.
- Infection from sources: sinuses, nasopharynx, Adenoids,Tonsils,
- Tuberculosis.
- Persistent traumatic rupture of TM.
- Grommet insertion.


Normal middle ear
Otitis media
Ear drum
Auditory bones
Eustachian tube
Infected fluid
in middle ear

CSOM (Cont.)

Organisms:

- Pseudomonas aeroginosa.
- Proteus.
- E. coli.
- Staphylococcus.
- Streptococcus.
- Anaerobic:- Bacteroides fragalis.
  Anaerobic Streptococcus

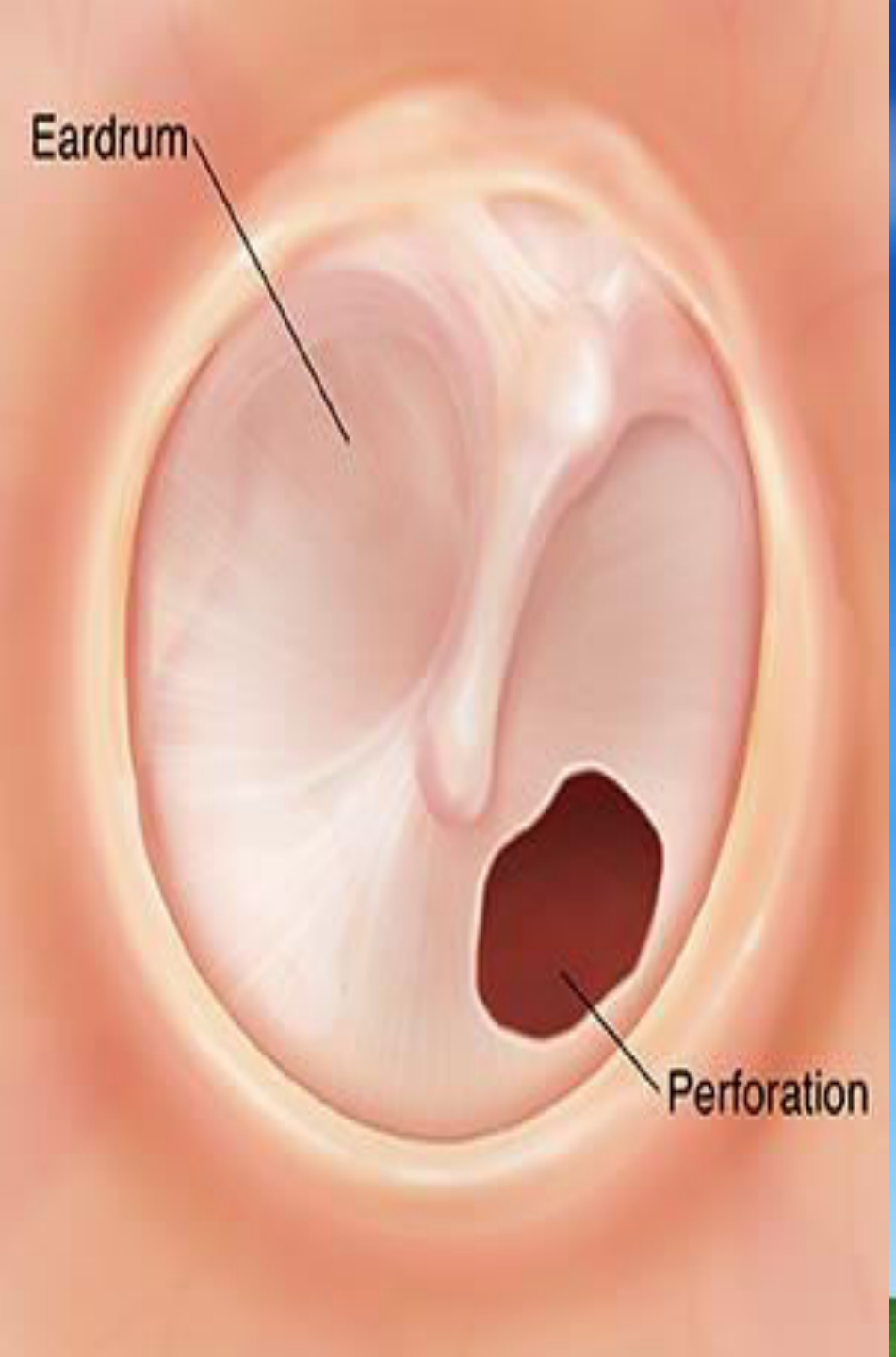
Epidemiology

Incidence of CSOM is higher in developing countries because of

- Poor socio economic status.
- Poor nutrition.
- Lack of health education.
- It affects both sexes and all age groups.

Pathology: (T T type)

- Perforation of pars tensa is a central perforation and its size and position varies.
- The middle ear mucosa becomes edematous and velvety (in active stage).
- middle ear mucosa is normal when disease is quiescent or inactive.


Eardrum
Perforation


Pathology (Cont.)

- A polyp may be seen, usually pale in colour.
- Ossicular chain is usually intact and mobile but may show some degree of necrosis.
- **Tympanosclerosis (hyalinisation and subsequent calcification of subepithelial tissue) may be seen in remnant of TM.**

Types of CSOM

1. Tubotympanic type: also called safe or benign type.

- It involves anteroinferior part of middle ear cleft (eustachian tube and mesotympanum)
- Is associated with a central perforation.
- There is no risk of serious complications/

Types of CSOM (TT type)

2. Aticoantral type: also called unsafe or dangerous type.

- It involves posterosuperior part of the cleft (attic, antrum and mastoid)
- Is associated with an attic or a marginal perforation.
- The disease is often associated with cholesteatoma.
- Risk of complications is high.

Clinical features (TT Type)

1. Ear discharge:

- is mucoid or mucopurelent
- constant or intermittent.
- non offensive.
- discharge appears mostly at time of upper respiratory Infection or entry of water into the ear.

2. Hearing loss:

- Is conductive type.
- Rarely exceeds 50 dB.

Clinical features (cont.)

3. Perforation:

- Always central.
- May be anterior, posterior or inferior to the handle of malleus.
- May be small, medium or large.

4. Middle ear mucosa:

- Normally it is pale pink and moist.
- When inflammed it looks red, edematous and swollen

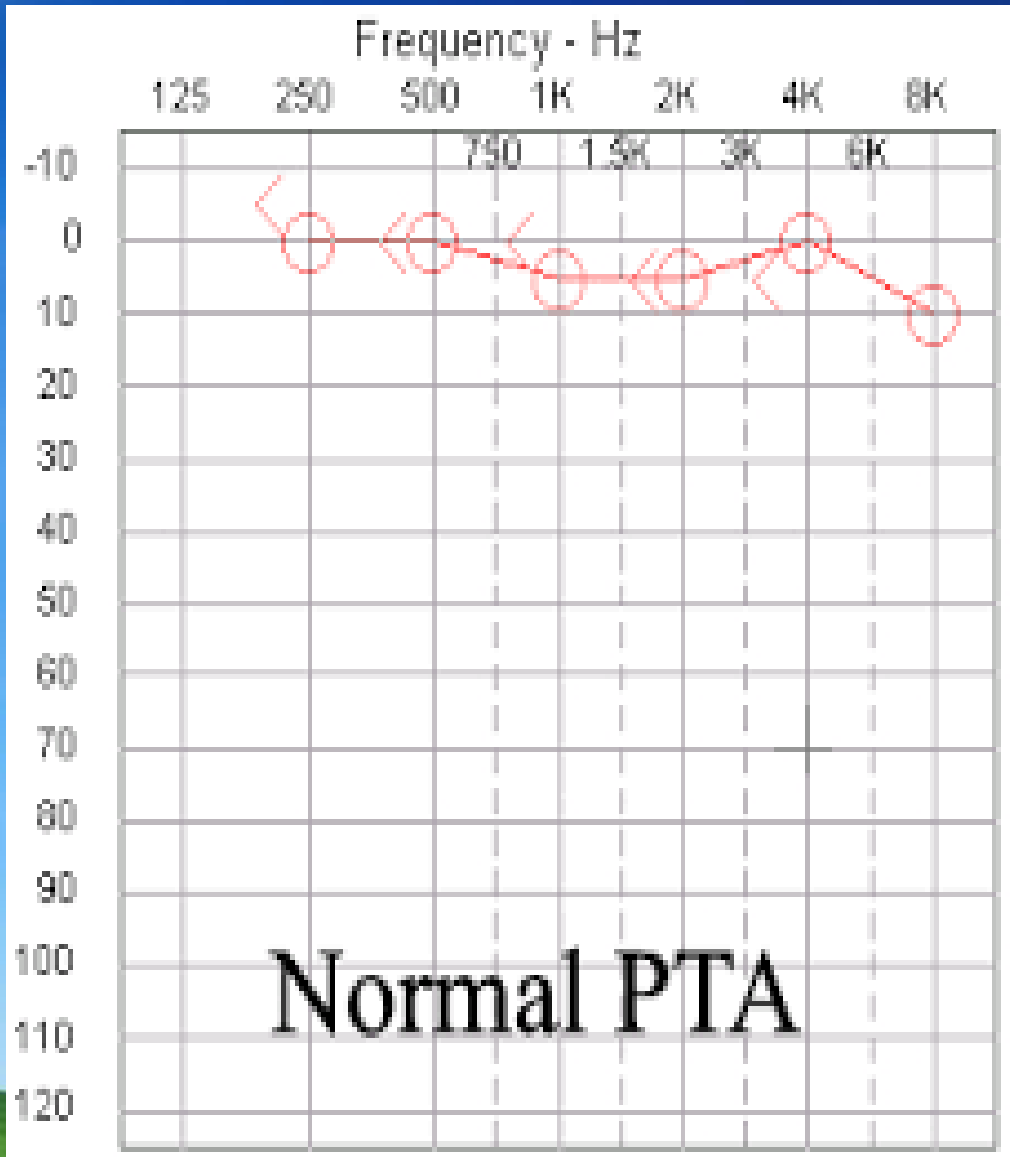
Investigations

1. Examination under microscope:

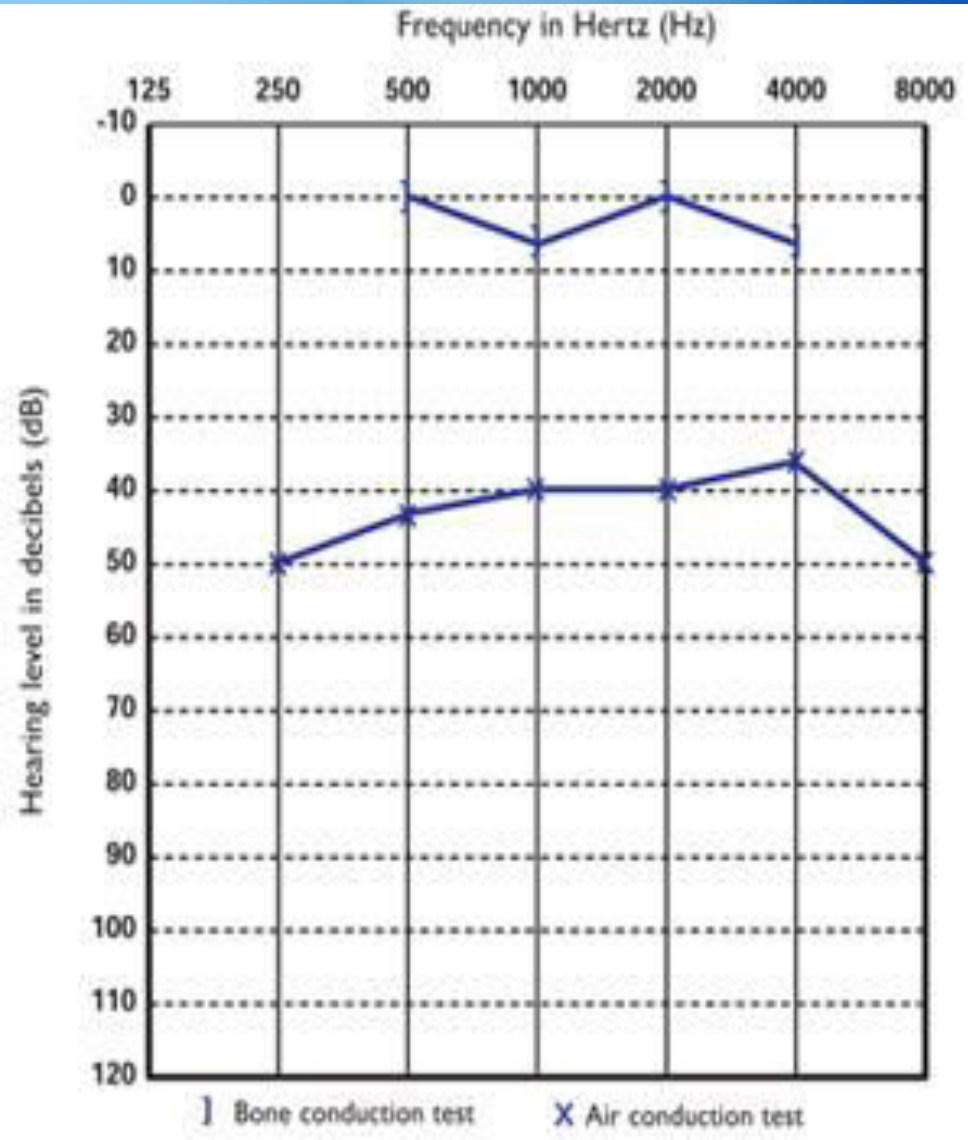
- Is essential in every case .
- Gives useful information regarding presence of granulations, status of ossicular chain, tympanosclerosis and adhesions.
- Rarely,cholesteatoma may co exist with a central perforation and can be seen under a microscope.

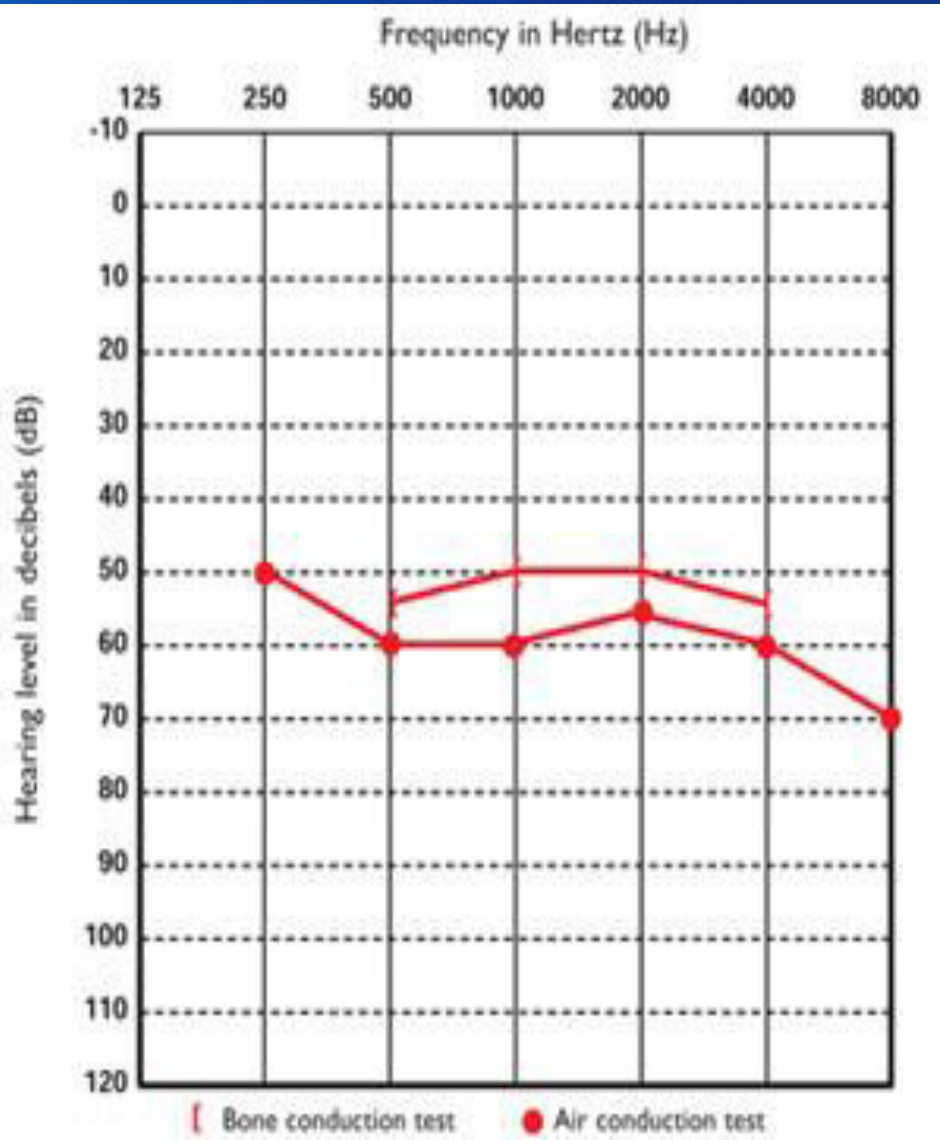
2. Audiogram:

- Gives an assessment of degree of hearing loss and its type.
- Usually conductive loss but SNHL may be present.



Audiogram showing conductive & SNHL





3. X ray mastoid / CT scan.

No evidence of bone destruction

Clouding of air cells.

4. Culture and sensitivity of ear discharge.

Helps to select proper antibiotic.

X- ray mastoid Towne's view

CSOM (Cont.)

Aims of treatment:

- To control infection.
- To eliminate ear discharge.
- To correct the hearing loss by surgical means.

Treatment

1. Aural toileting- if discharge present.
   - ✓ By suction clearance
   - ✓ By dry mopping with sterile cotton buds
   - ✓ By wet mopping
   - ✓ By syringing.
2. Ear drops- antibiotic ear drops combined with steroids are used.

3. Systemic antibiotics- in acute exacerbation of chronic infection. Amoxacillin / aziyhromycin / cefixime/ cephorexime etc.

4. Nasal decongestent- xylometazolin / oxymetazolin.

5. Treatment of contributory factors- chronic tonsillitis/ adenotonsillitis / sinusitis/ DNS / nasal allergy should be treated.

Treatment (cont.)

7. Surgical treatment- aural polyp or granulations, if present should be removed.
8. Reconstructive surgery- once ear is dry, myringoplasty with or without ossicular reconstruction can be done to restore hearing.

Thank you All

What is Tympanoplasty?

It is the microsurgical repair of perforation of TM.

TYMPANOPLASTY

Prerequisites of Tympanoplasty -

1. Ear should be dry at least for 6 weeks.

2. E. tube should be functioning .

3. There must be enough cochlear reserve .

4. There should be no contributory factors..

Advantages of Tympanoplasty

- To make the ear dry by preventing further infection in the ear.
- To improve hearing & to prevent further deteriorating of hearing.
- To prevent complication.
- For using hearing aid.
- To enable recruitment in certain profession.

CSOM- Chronic Suppurative Otitis Media(cont.)

- ✓IS TYMPANOPLASTY DONE IN BANGLADESH?
- ✓CAN IT BE DONE BY LOCAL ANESTHASIA?
- ➢WHAT IS USED AS GRAFT AS MATERIAL?
- ➢IS IT A COSTLY OPERATION?
- ➢IS IT A RISKY OPERATION?
- ➢DOES IT REQUIRE LONG HOSPITAL STAY?
- ➢DOES THIS OPERATION HAVE MANY COMPLICATIONS?
- ❖WHAT TYPE OF SURGERY IS IT?
- ❖WHAT IS THE SUCCESS RATE OF THIS SURGERY?

Thank you All