

Chronic SOM and its complications

Definition

- It is the longstanding infection of the middle ear cleft which is characterized by persistent or intermittent infected discharge through a permanent perforation of tympanic membrane.

Ch.SOM

- Tubotympanic , benign and safe
- Atticoantral, progressive and dangerous

Etiology

- Tubotympanic
 - Permanent perforation of T M
 - Poor functions of eustachian tube
 - Infected focus in URT
- Atticoantral
 - Cholesteatoma

Pathogenesis Tubotympanic

- T M acts as protective barrier , when it is lost (perforated) bacteria from the external ear directly contaminate the middle ear

Cont.

The intact tympanic membrane acts as air cushion in the middle ear which prevent reflex of nasopharyngeal secretions & bacteria into middle ear

Pathogenesis Atticoantral

Cholesteatoma

Skin in wrong place(middle ear)

It is squamous epithelium lined sac filled with desquamated keratinized epithelium

- Types Congenital
- Acquired primary , secondary
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Pathogenesis of Cholesteatoma

- Congenital rest theory
- Invagination theory
- Invasion\ Migration theory
- Metaplastic theory
- Basal cell hyperplasia

Erosion of bony structures by cholesteatoma

- Mechanism
- Increased vascularity
- Products of bacterial infection--- toxins
- Pressure necrosis
- Cytokines--- Interlukines

Bacteriology of ch.SOM

- Staphylococcus
- Bacillus proteus
- Pseudomonos
- E-coli
- Strep.viridans and pneumoni
- Anaerobes Bacteroids

Clinical features

- Ear discharge
- Hearing loss
- T M perforation
- Middle ear mucosa
- Granulations polyps
- Cholesteatoma
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Investigations

- C\S of ear discharge
- Examination under microscope
- Audiogram
- X-Rays mastoid
- C T scan

Management of tubotympanic

- Water proof ear
- Aural toilet
- Antibiotic ear drops
- Systemic antibiotics
- Treatment of infective focus in URT
(Tonsillitis , Adenoids , Rhino -sinusitis)
- Myringoplasty \ Tympanoplasty

Management of Atticoantral

- Water proof ear
- Aural toilet
- Antibiotic ear drops
- Systemic antibiotics
- Canal wall down operations

Atticotomy

Modified radical mastoidectomy

Radical mastoidectomy

Contd

- Canal wall up operations
Cortical mastoidectomy with second look operation
- Combine approach tympanoplasty

Indications for radical surgery

- When intracranial complications are imminent
- When there is extensive cholesteatoma
- When previous conservative surgery has failed to eradicate the disease
- In unilateral disease when patient wants dry ear

Intracranial Complications

- Extradural abscess
- Subdural abscess
- Brain abscess
- Meningitis
- Lateral sinus thrombosis
- Otitic hydrocephalus

Extracranial complications

- Facial nerve paralysis
- Petrositis
- Labyrinthitis
- Bezold's abscess ,zygomatic abscess,
Citilli's abscess
- Post auricular abscess

Routes of spread of infection

- Extension through preformed pathways
- Extension by bony erosion
- Extension by progressive thrombophlebitis through haversian venous channels

Features of Complications of CSOM

- Persistent Headache
- Earache, pain & swelling around the pinna
- Fever
- Altered consciousness
- Vertigo, Nausea & Vomiting
- Facial weakness
- Irritability, Neck rigidity etc.

Management of Complications

- Admission
- Systemic Antibiotics
- Investigations
- Early Neurosurgical consultation & intervention
- Treatment of the primary ear disease resulted in complications