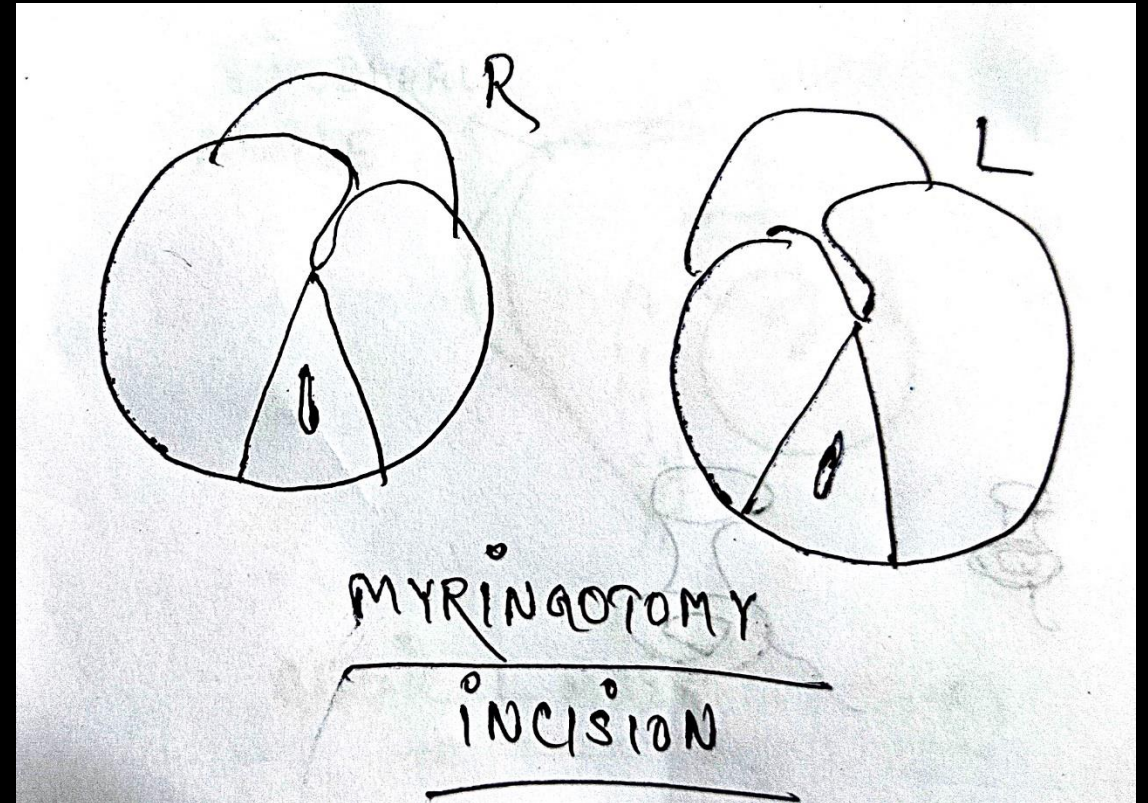


## SURGERIES OF EAR

## MYRINGOTOMY:

- Is a procedure where an incision is made in the anteroinferior quadrant of the tympanic membrane with or without grommet or ventilation tube .



## **Indications:**

- 1) AOM with bulged TM, impending to rupture & not responding to conservative treatment for 24-48hrs.
- 2) AOM with ICC or ECC, e.g., VIIN palsy, labyrinthitis, etc.
- 3) Secretory otitis media or OME.

## **Contraindications:**

Glomus jugulare tumour – profuse bleeding

**Anaesthesia:** Usually under L/A but under G/A in children

## **Complications:**

- 1) Injury to incudostapedial joint
- 2) Injury to jugular bulb
- 3) Middle ear infection

### **Myringoplasty:**

Is a surgical procedure which involves repair of the tympanic membrane perforation .

### **Tympanoplasty:**

Is a surgical procedure involving repair of tympanic membrane perforation as well as reconstruction of ossicles.

**Graft material:** Temporalis fascia

Tragal perichondrium, cartilage

Fat, vein

**Mastoidectomy: 3 types-**

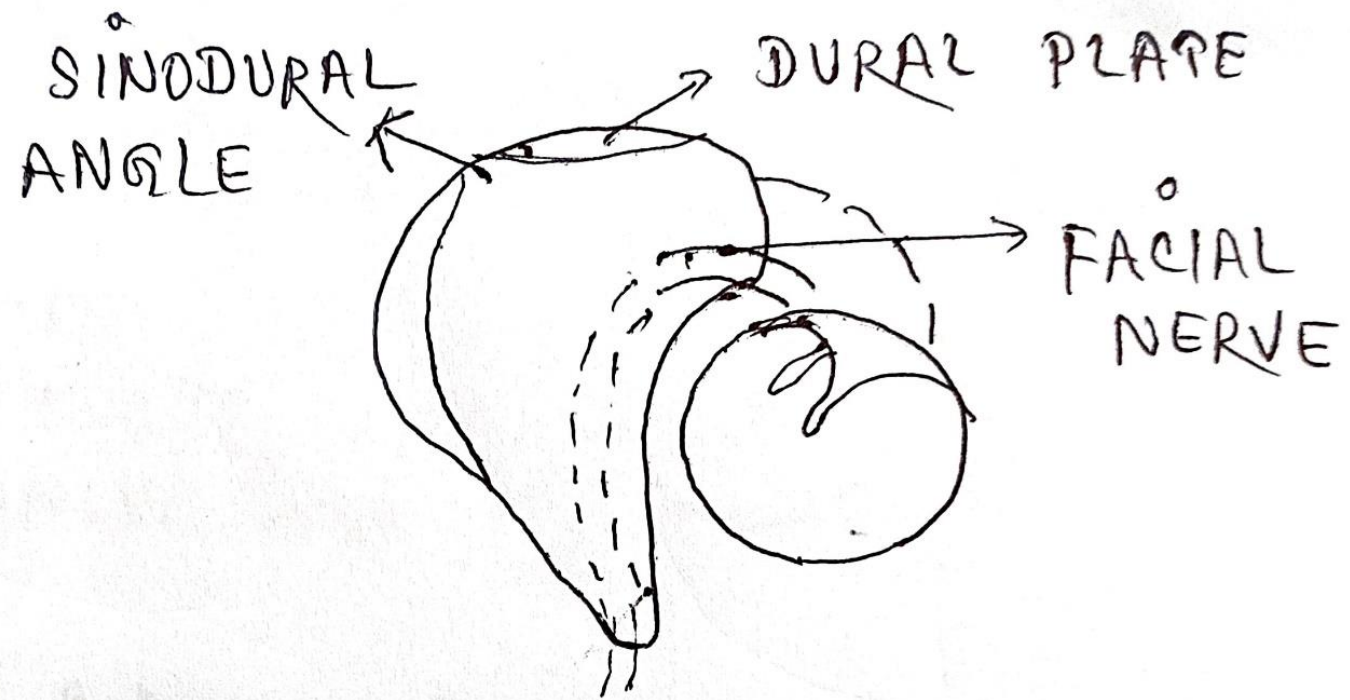
- Cortical mastoidectomy
- Modified radical
- Radical

- **Cortical Mastoidectomy:**

- Is a surgical procedure where all accessible mastoid air cells are completely exenterated without disturbing the middle ear keeping the posterior meatal wall intact & converting them into a single cavity.

- **Indications:**

- 1) Acute mastoiditis not responding to conservative treatment.
- 2) Masked mastoiditis.
- 3) CSOM, TT type when ear is not getting dry.
- 4) As a route to other operations, e.g., cochlear implant, decompression of VII N, endolymphatic sac surgery, acoustic trauma, labyrinthectomy, etc.



CORTICAL MASTO IDECTOMY

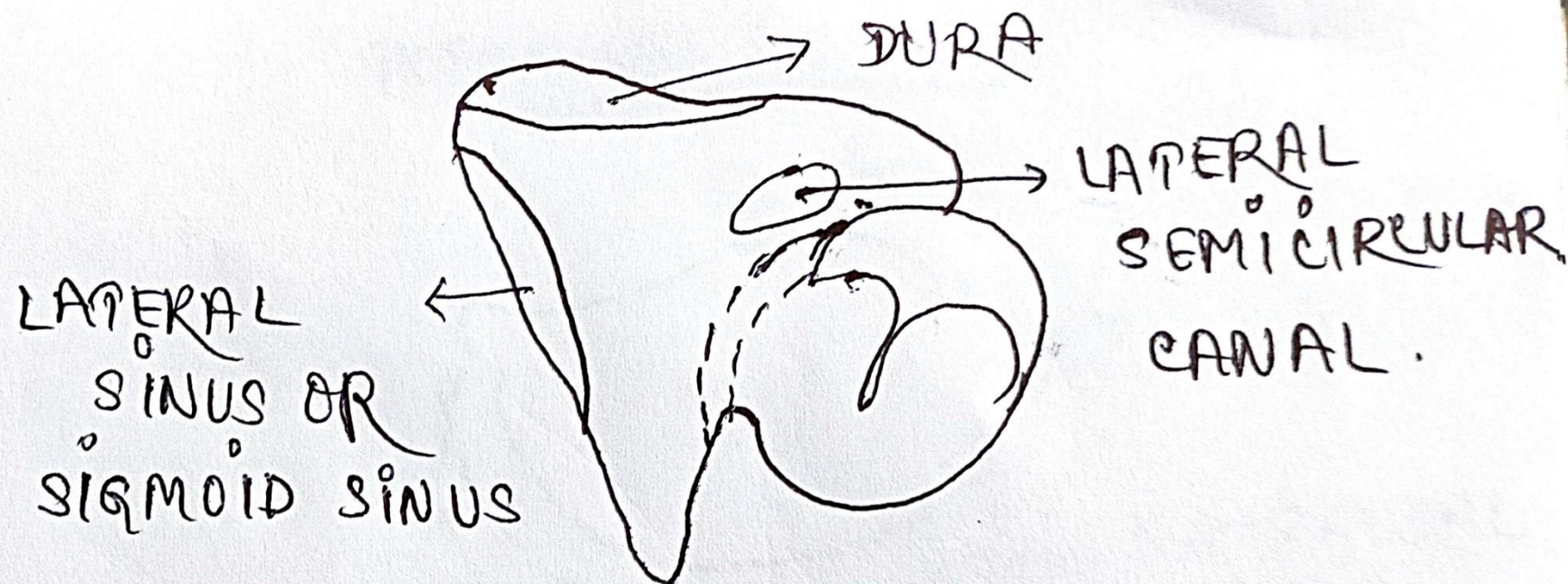


## Procedure:

- Postaural incision made about 1cm behind the postauricular sulcus, starting from the upper attachment of pinna to the mastoid tip. Keeping the suprameatal spine (MacEwen's triangle bounded by supramastoid crest above, posterior meatal wall in front & a tangential line joining these two lines) as the landmark after elevating the periosteum, mastoid antrum is exposed by drill which is about 1.5cms deep to the mastoid cortex. All accessible air cells are removed & lateral semicircular canal is identified. Now the mastoid cavity is bounded by posterior meatal wall in front, dura above, sigmoid sinus behind & mastoid tip below.

### **Modified radical mastoidectomy:**

- Is a surgical procedure which involves exploration of mastoid antrum, mastoid air cells, attic & middle ear, removal of disease process from these areas, making a single cavity between the mastoid & middle ear by lowering the facial ridge, i.e., posterior meatal wall. Tympanic membrane remnant & ossicular chain are preserved.
- Meatoplasty is done in this procedure which includes excision of conchal cartilage to widen the meatus for ventilation, inspection & drainage of mastoid cavity.



MODIFIED RADICAL MASTOIDECTOMY

## Indications:

- CSOM with cholesteatoma & granulation tissue.
- **Radical mastoidectomy**: Is a procedure which involves exploration of mastoid antrum, attic, middle ear, eradication of disease process from these areas, making a common cavity by removing the facial ridge. All the remnants of TM & ossicles are removed except footplate of stapes.
- **Indications**:
  - 1) Extensive cholesteatoma
  - 2) CSOM with ICC
  - 3) Carcinoma of middle ear

### **Aims of mastoid surgery:**

- 1) To stop discharge permanently & make the ear dry.
- 2) To render the patient safe by removing the diseased mucosa & bone, granulation tissue, polyp or cholesteatoma.
- 3) To prevent further deterioration of hearing or to improve hearing.
- 4) To prevent or treat the complications.

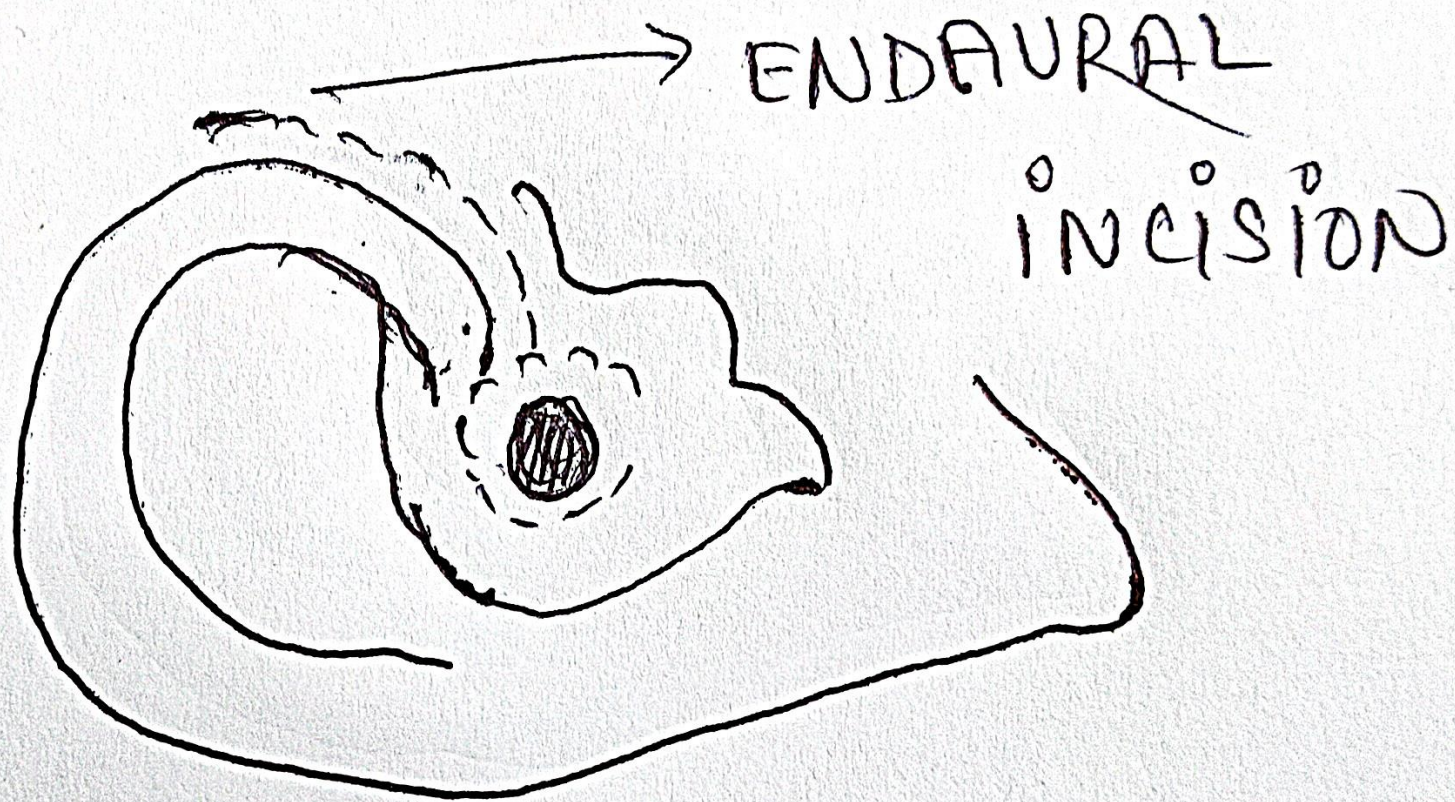
## Complications:

- 1) Injury to VII N
- 2) Injury to lateral semicircular canal - vomiting, vertigo
- 3) Injury to dura mater
- 4) Injury to labyrinth – SNHL
- 5) Injury to sigmoid sinus – profuse bleeding
- 6) Dislocation of incus
- 7) Postoperative wound infection

## Incisions:

- 1) Postaural – usually common.
- 2) Permeatal
- 3) Endaural

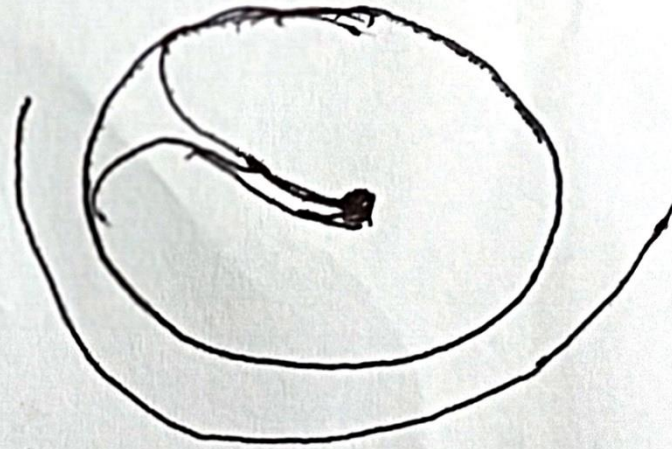






PT. LYING DOWN POSITION

12 O'CLOCK  
POSITION



6 O'CLOCK  
POSITION

PERMEATAL

INCISION

# POSTAURAL INCISION

