Diseases of the external ear

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External Ear : Diseases

i. Congenital.

ii. Traumatic.

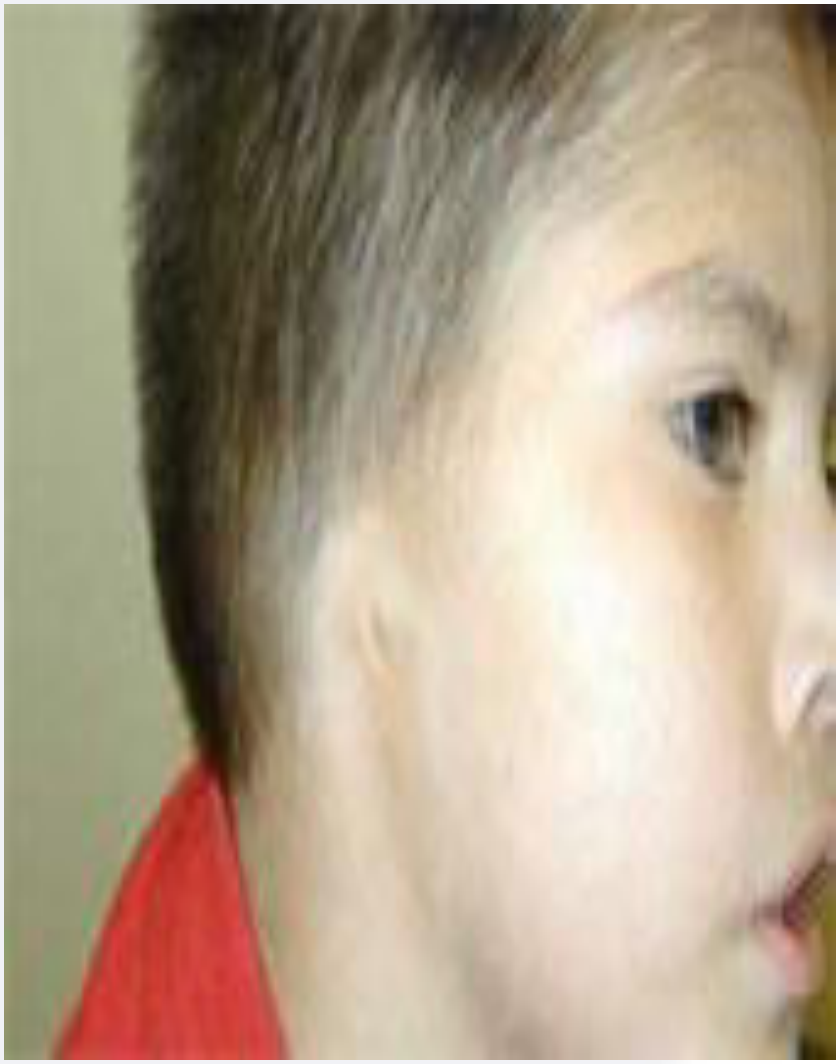
iii. Inflammatory.

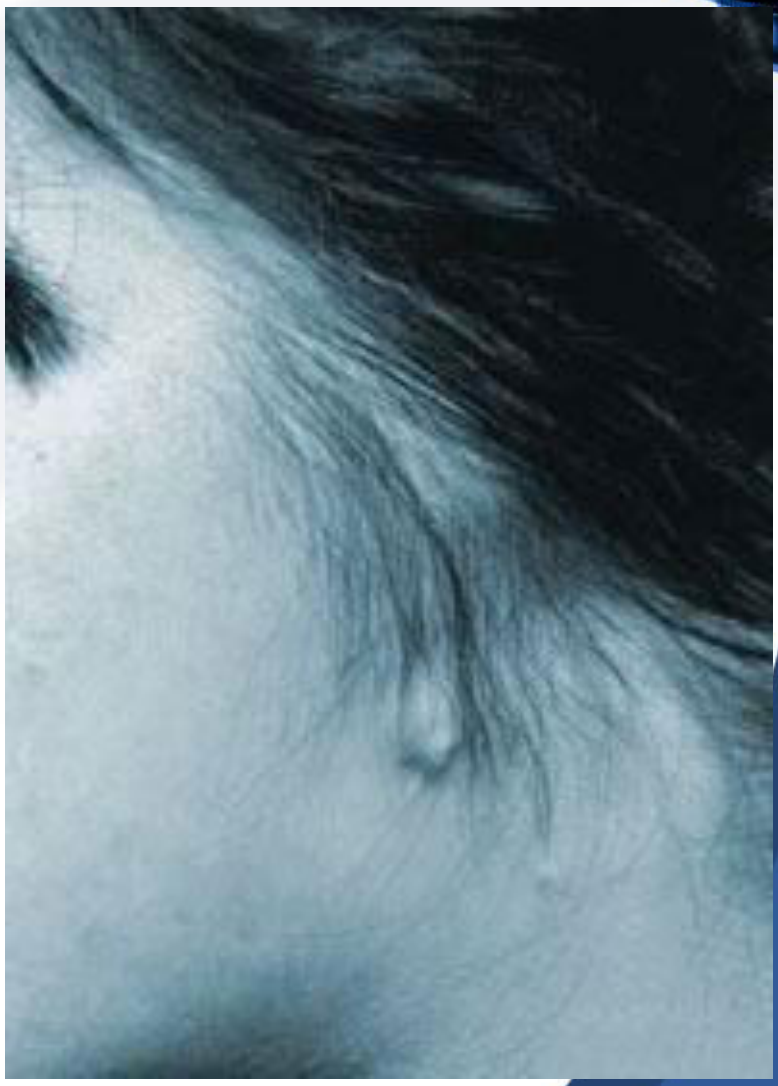
iv. Neoplastic.

Congenital Diseases.

- Anotia- Complete absence of pinna.
- Microtia- Partial absence of pinna.
- Macrotia- Excessively large pinna.
- Accessory auricle- Skin covered tags that appear on a line drawn from the tragus to the angle of mouth.
- Pre auricular sinus/cyst.
- Collaural fistula- An abnormality of the 1st branchial cleft. The fistula has two openings; one, situated in the neck and other in the external canal or middle ear
- Bat ear (Lop ear)- Abnormally protruding ear.

ANOTIA

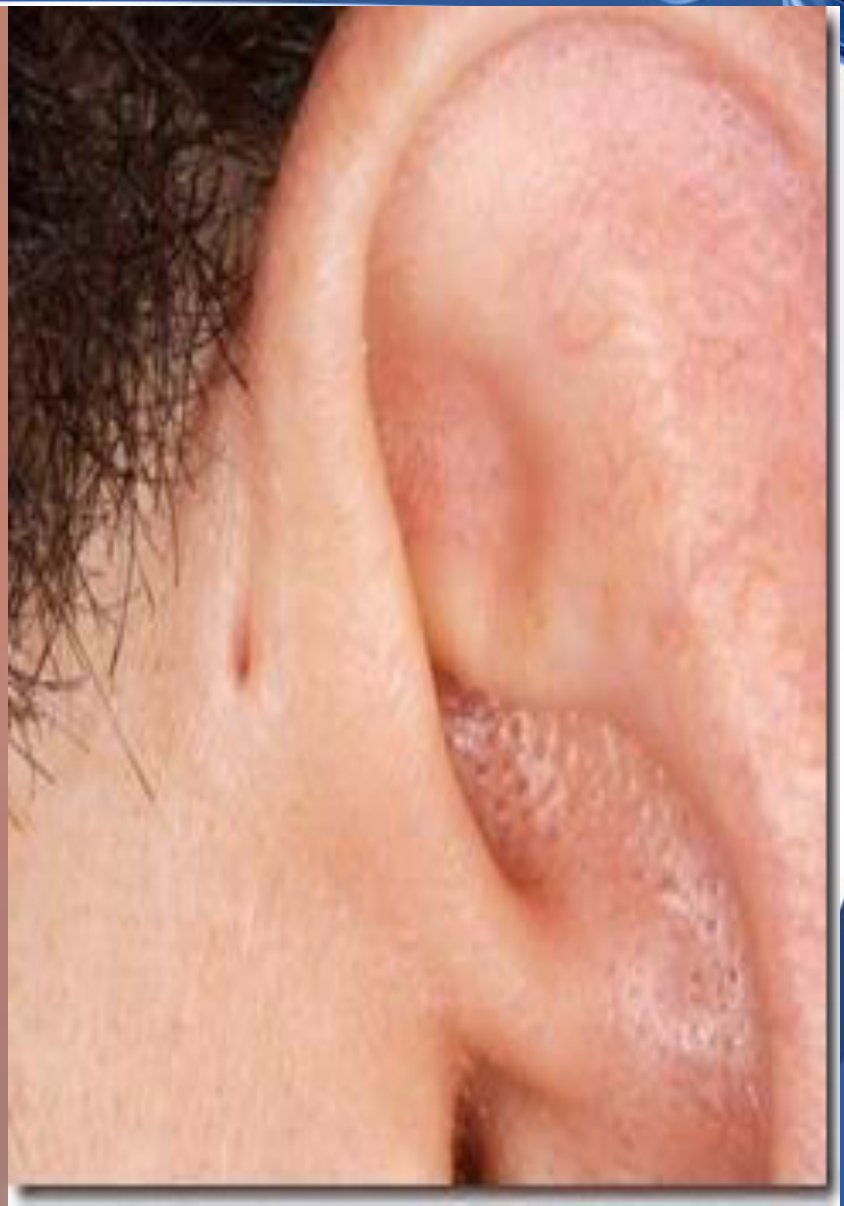




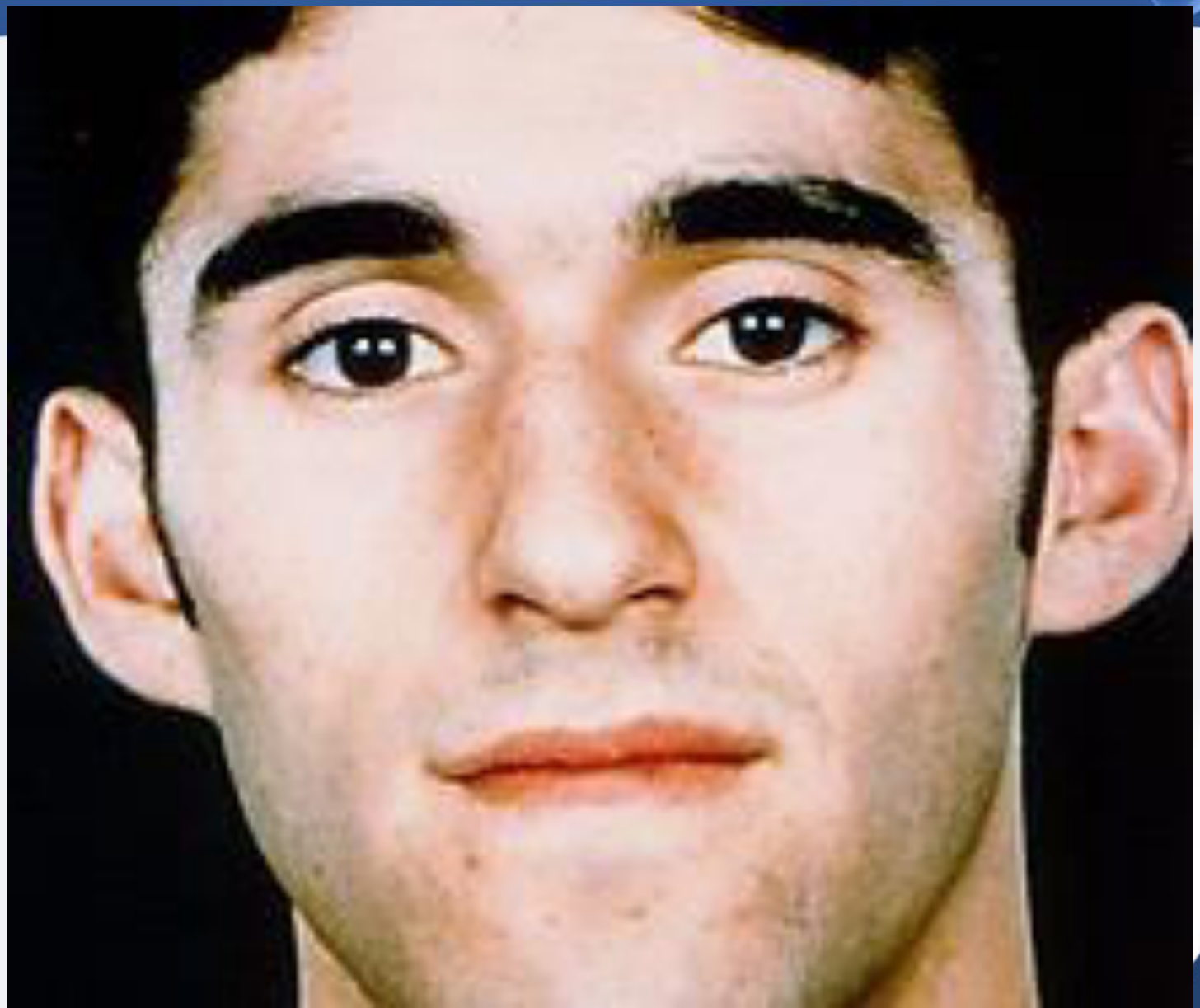
MICROTIA

MACROTIA

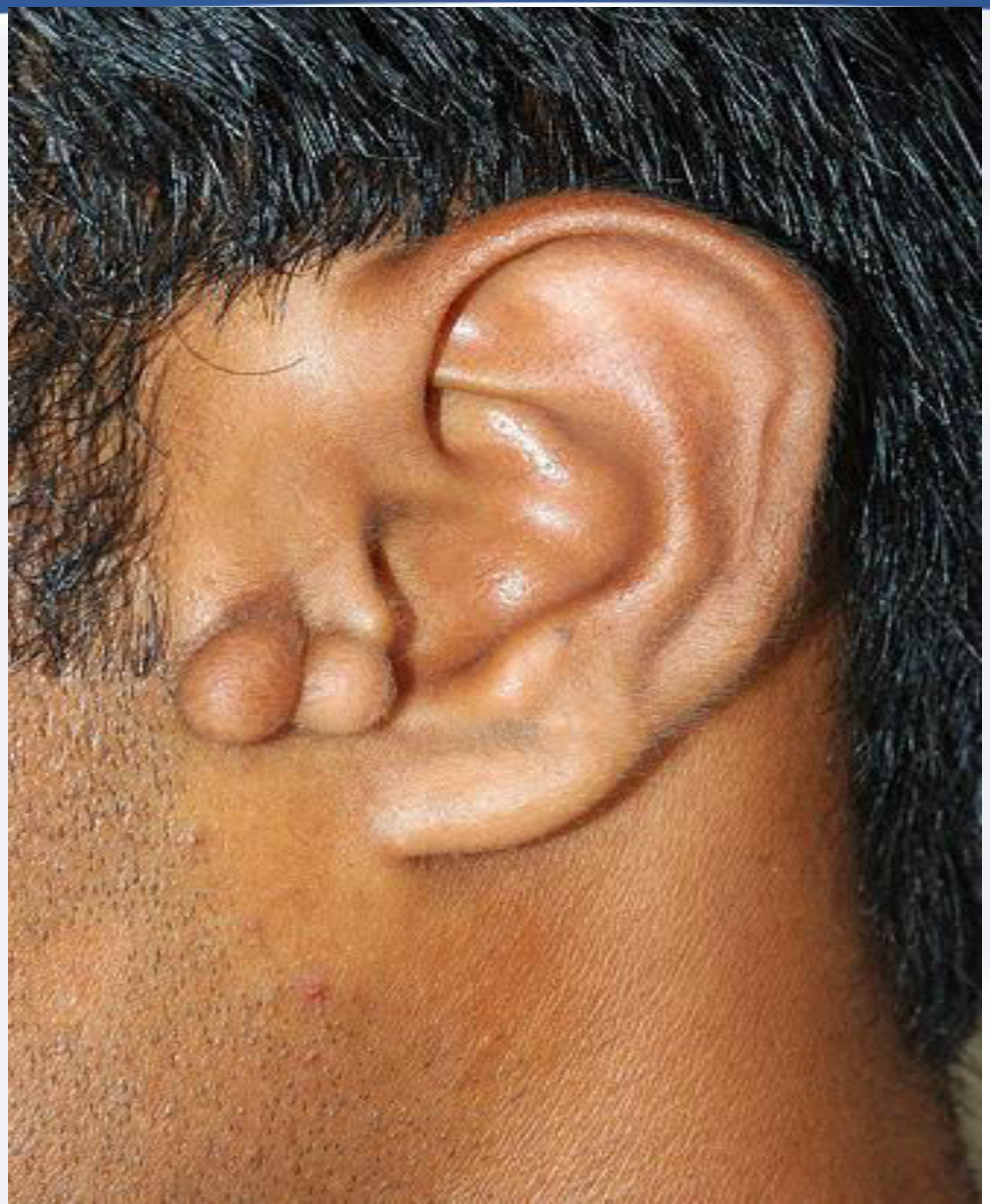
PREAURICULAR SINUS



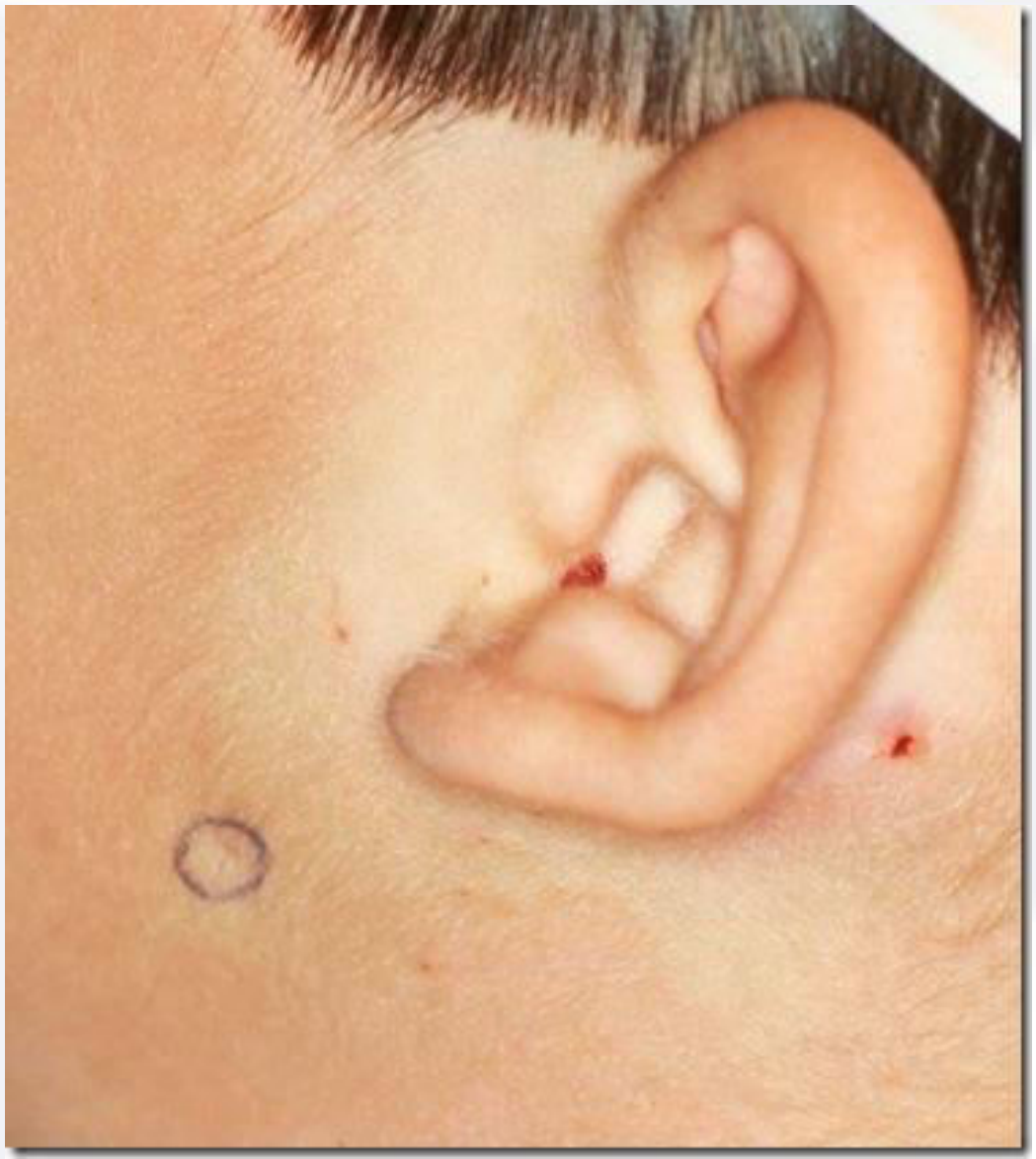
BAT EAR



ACCESSORY AURICLE



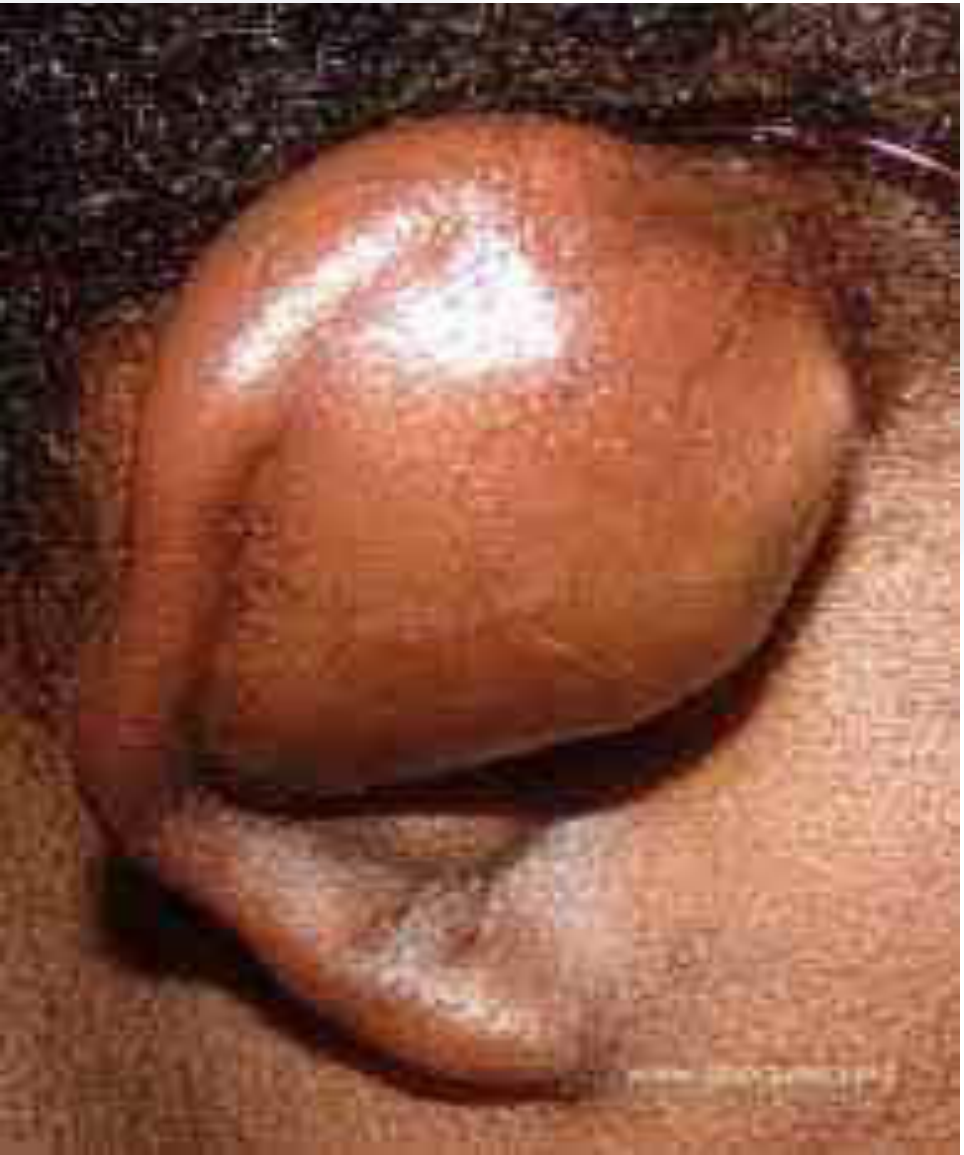
COLLOAURAL FISTULA



Traumatic conditions of the Pinna

- Haematoma of the auricle.
- Lacerations.
- Avulsion of pinna.
- Frost bite.
- Keloid of auricle.

Traumatic condition of the auricle.



INFLAMMATOTY DISEASES

- Perichondritis.
- Otitis Externa.
- Furunculosis.
- Otomycosis.

NEOPLASTIC LESION

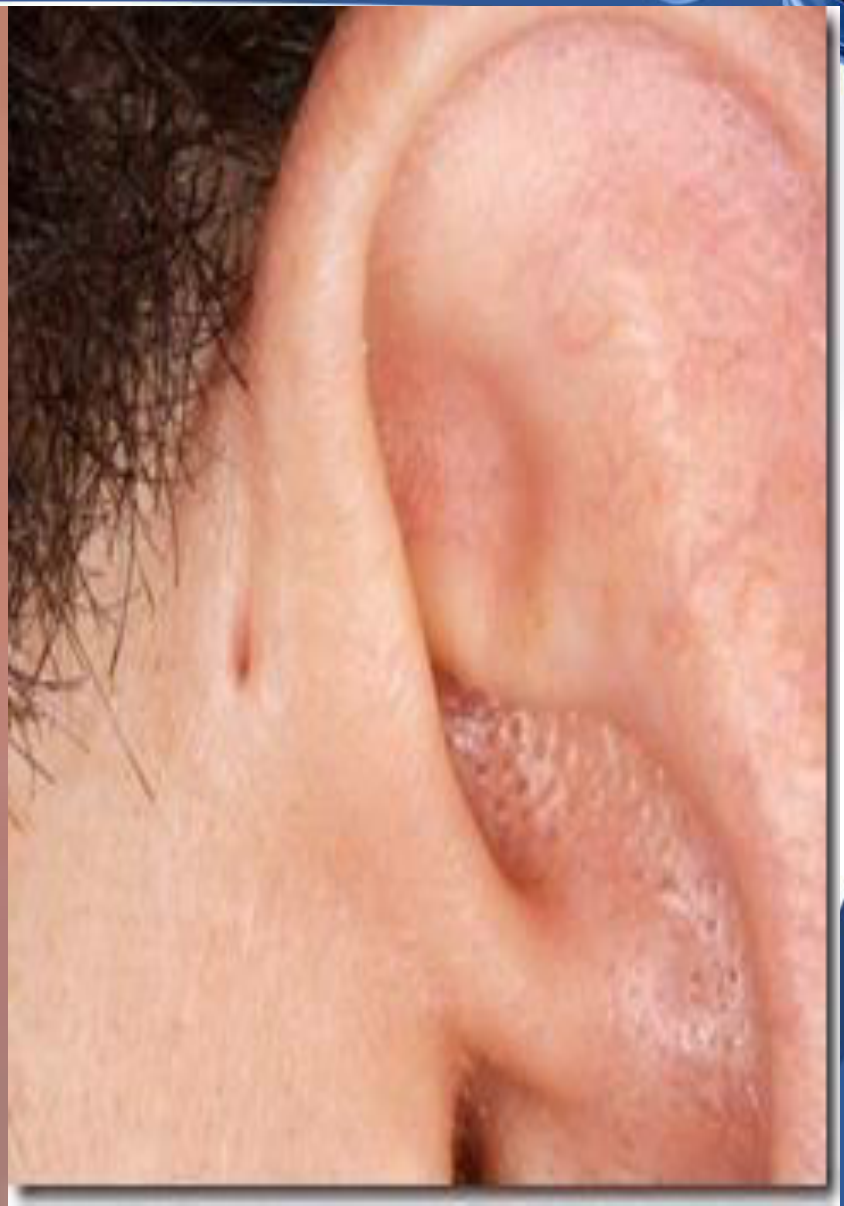
Benign:

I. Osteoma / Exostosis
II. Papilloma
III. Chondroma
IV. Haemangioma
V. Adenoma.
VI. Ceruminoma.

Malignant:

I. Squamous cell carcinoma
II. Basal cell carcinoma
III. Melanoma.
IV. Malignant ceruminoma

PREAURICULAR SINUS



Pre auricular sinus/cyst

- Commonly seen at the root of the helix.
- Due to incomplete fusion of tubercles.
- Any age, any sex.
- May be symptomatic or asymptomatic.
- May get repeatedly infected causing purulent discharge.
- Abscess may also form.
- Surgical excision of the sinus tract.

Impacted wax

What is wax (Cerumen) ?

Wax is the mixture of secretion ceruminous glands, sebaceous glands, desquamated epithelial debris, hair, keratin and dirt.

Impact = to press firmly together.

Impacted wax (cont.)

Function of Wax:

- It lubricates the external auditory canal & by this they trap the foreign bodies.
- Antibacterial action.
- Usually a small amount of Wax is formed which dries up and comes outwards and expelled during chewing & yawning.
- If excessive Wax is formed or if the canal is narrow then the Wax will collect more and will become impacted.

Impacted wax (cont.)

Clinical Features:

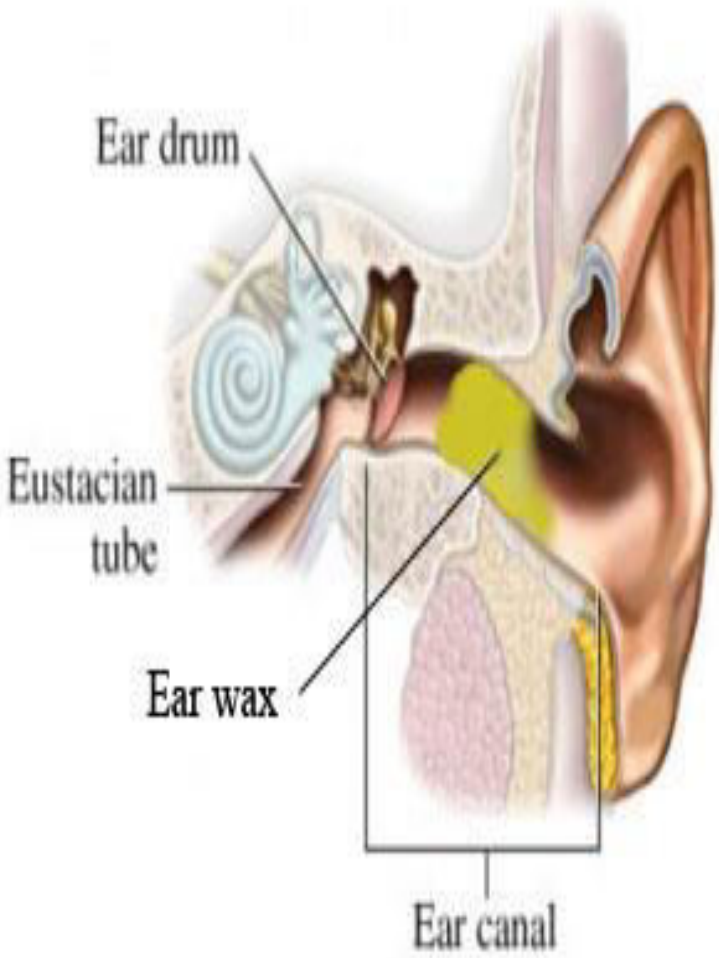
1. Deafness or sense of blocked ear.
2. Pain in ear.
3. Itching.
4. Tinnitus & giddiness.
5. Reflex cough.

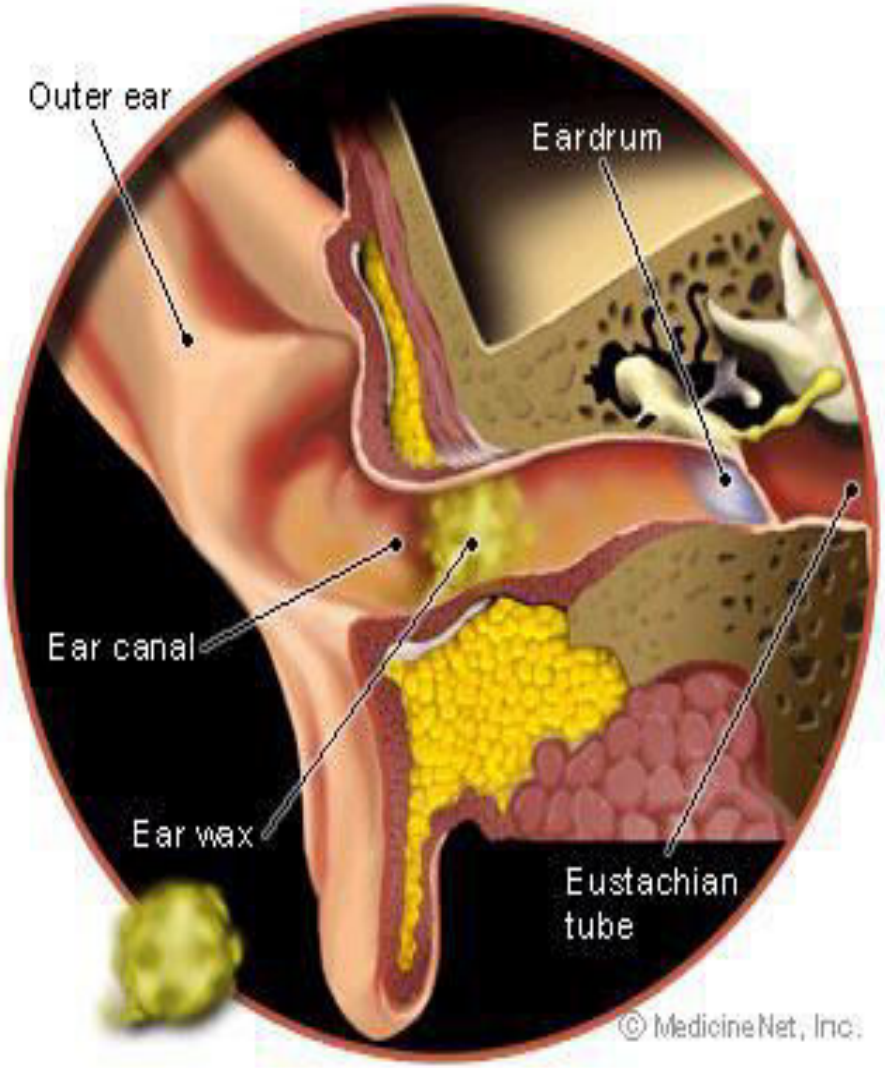
Impacted Wax (cont.)

Treatment:

- Hard impacted Wax is made soft first then removed by syringing & suction.
- If not soft then removal is done under G/A with Microscope.
- Softening can be done by Sodium-bi-carbonate (SODIB) sol. 7.5%, 3-5 drops 3-4 times for 7-10 days.

Impacted Wax (Cont.)





Foreign body ear.

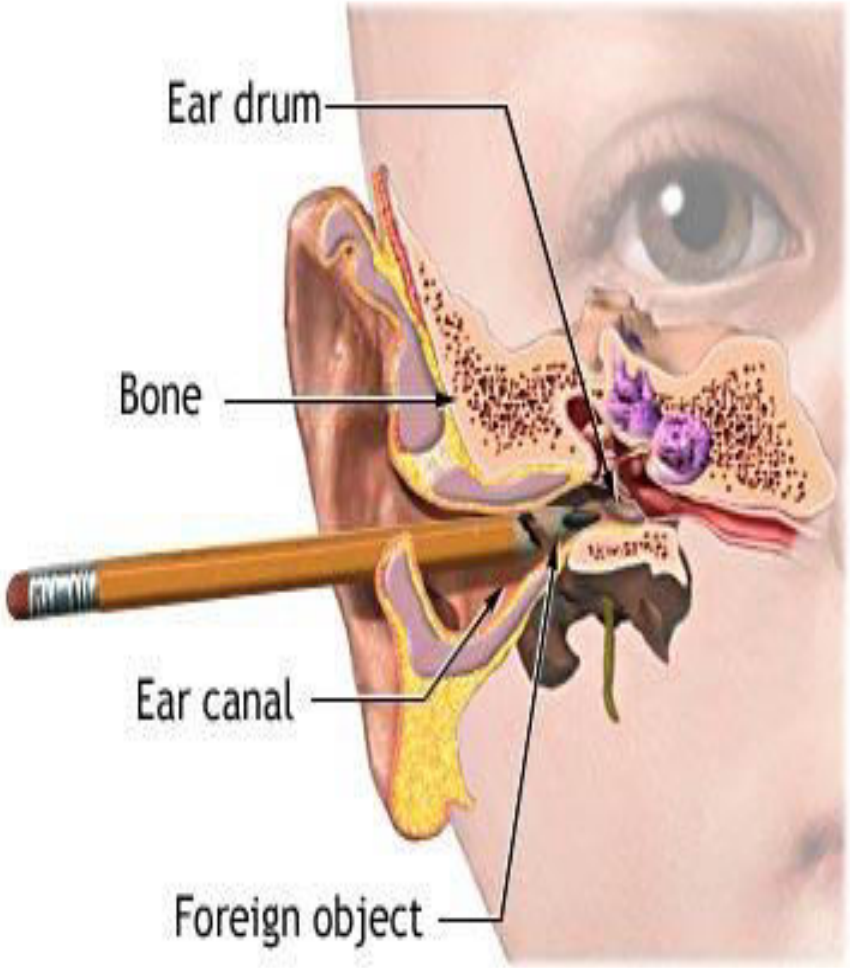
- Matchsticks, Hair pin and Syringe nozzles are frequently concerned as are attempts to remove such smooth, round objects as a bead or ball bearing.

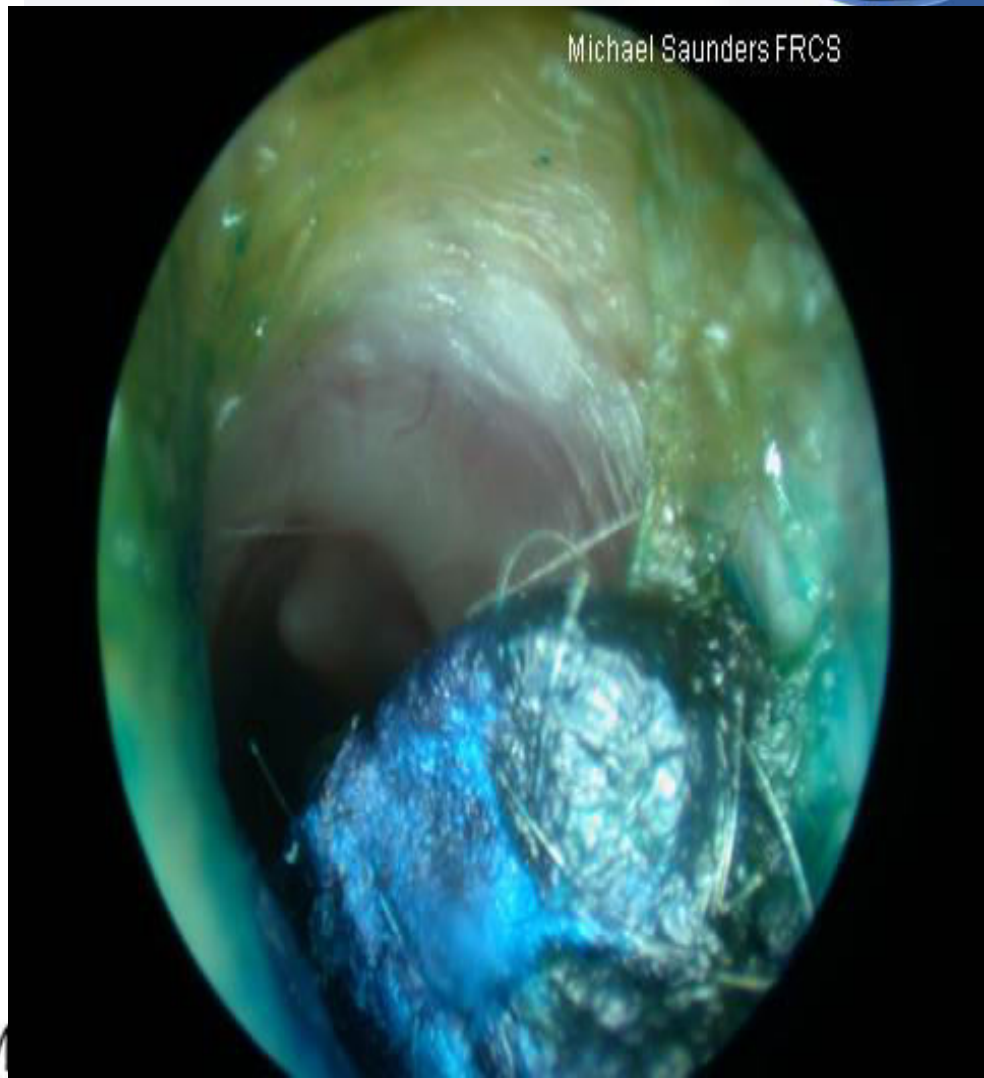
Foreign body ear (cont.)

Types:

Living	Non living	
	Vegetable	Non-vegetable
Bed bugs		
Insects	Seeds	Stone
Maggots	Paddy	Plastic
Mosquitoes	Bean seeds	Metal
Cockroach	Grains	Paper
Licks		Pieces of lead pencils
Ant		

Foreign body ear (cont.)





Foreign body ear (cont.)

Incidence:

- Common in children.
- Related with mental distress.

Clinical Feature:

Depends upon the nature of the foreign body.

Living	Non living
1. Intense noise & pain.	1. Pain if sharp
2. Irritation in the ear.	2. Deafness if occluded
	3. Irritation

Foreign body ear (cont.)

Treatment:

Basic principles of Removal:

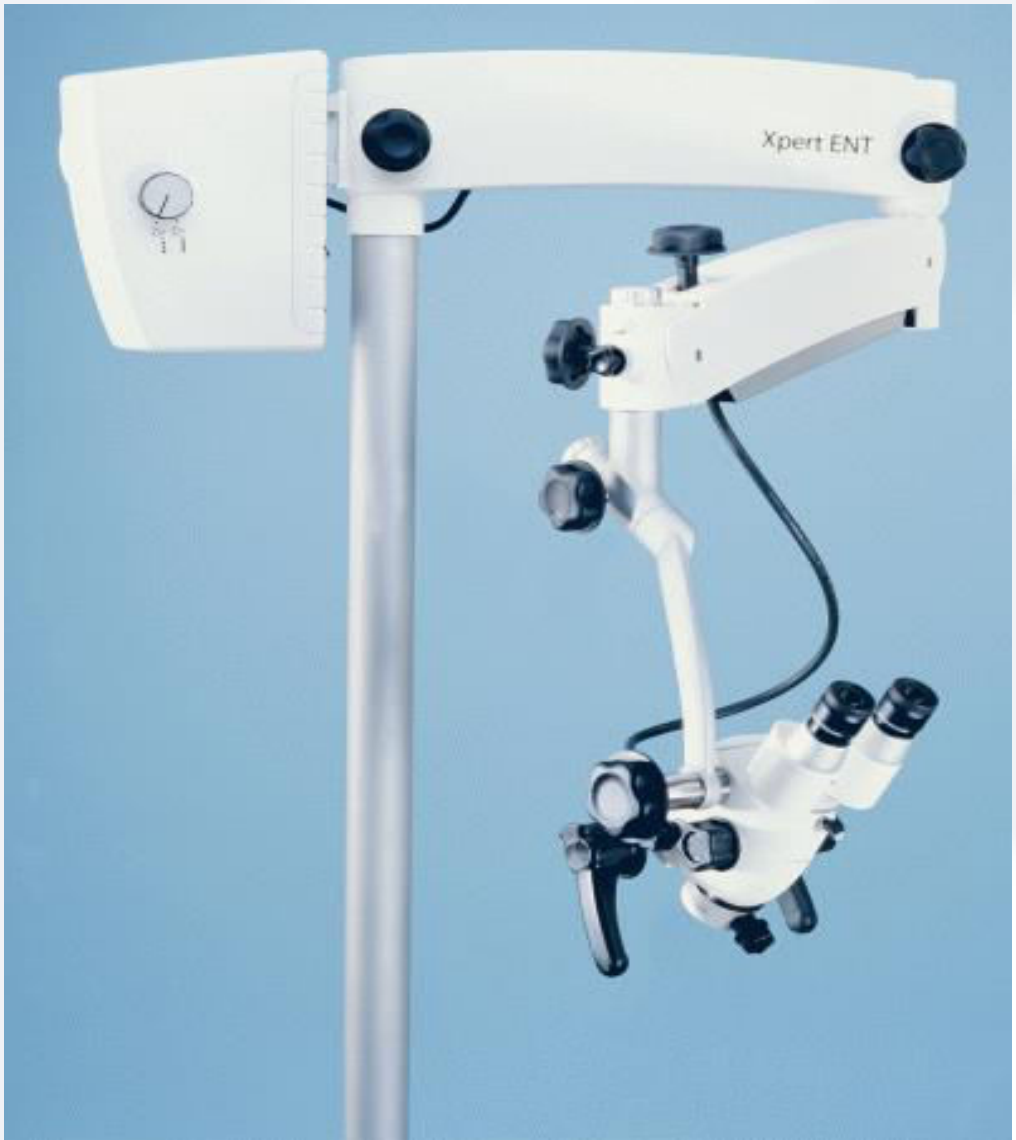
- **If patient is child & non co-operative adult or apprehensive.**
- **If the foreign body is impacted or in the middle ear.**

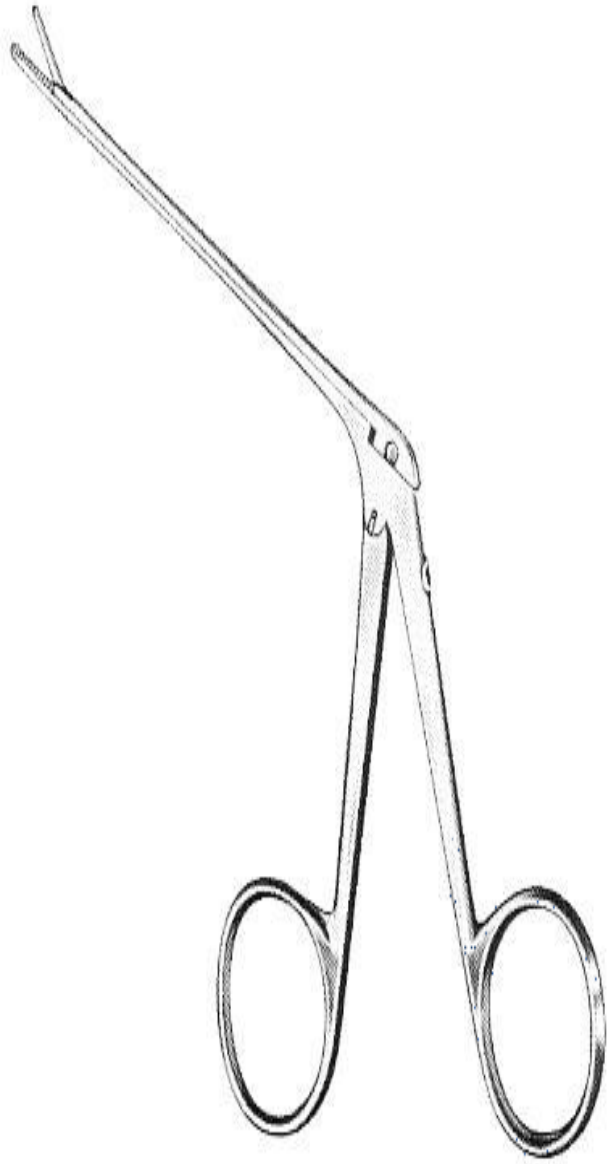
Removal of foreign body under General Anesthesia with operative Microscope.

- **If the foreign body is not impacted & the patient is co-operative**

Removal of foreign body without GA.

Operating microscope



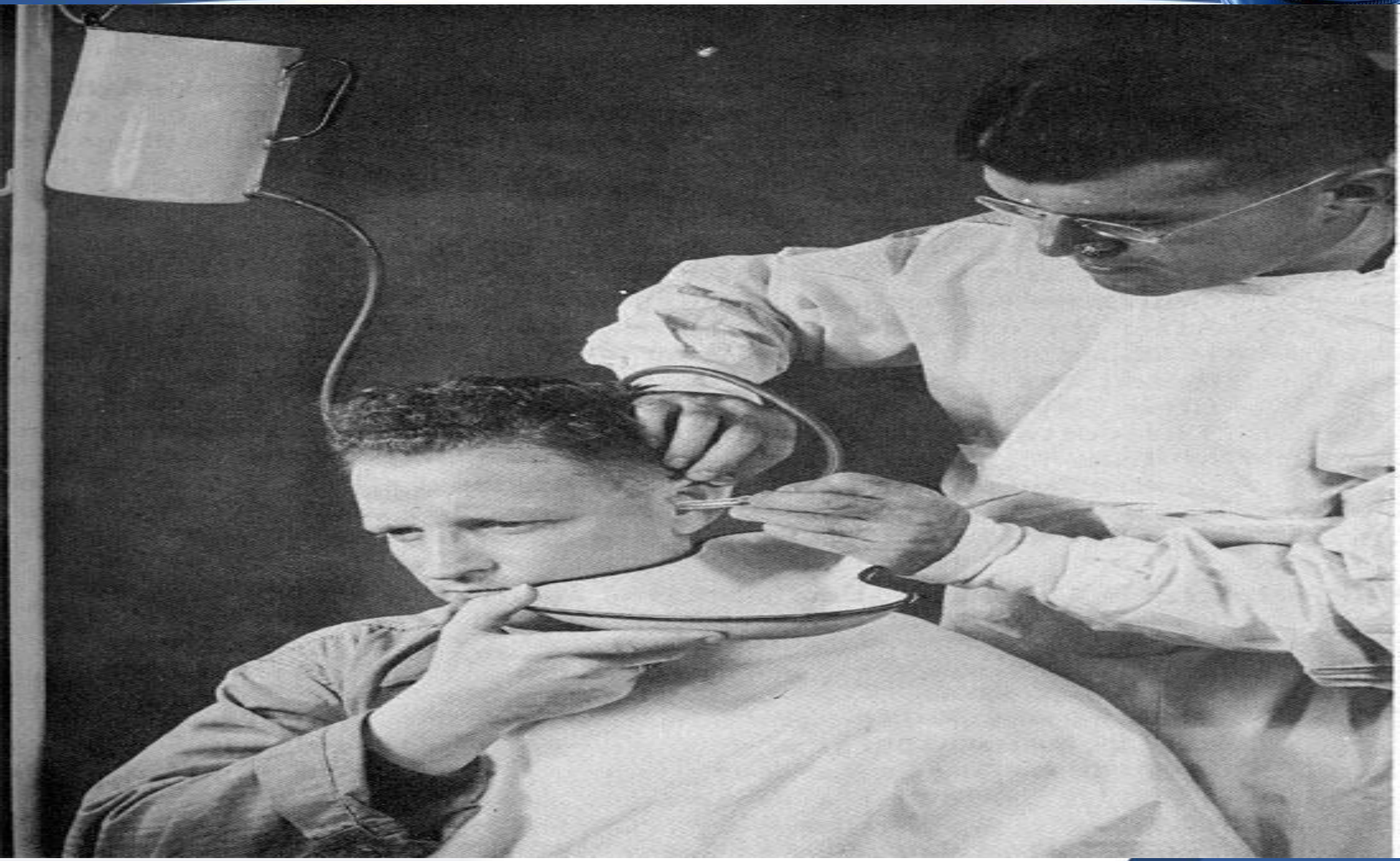


Removal of FB ear with operating microscope.

Methods of removal of foreign body ear

1. Forceps removal.
2. FB hook.
3. Syringing.
4. Suction.
5. Microscopic removal with special instruments.
6. Post aural approach.

Syringing (old method)



Syringing

Removal of FB with FB hook

Methods of removal of foreign body ear (cont.)

Forceps:- pieces of paper, cotton, rubber.

F.B. hook:- Rounded objects or seeds

Syringing:- Dead insect

Microscope:- Foreign body in the deeper part

Post aural: Impacted foreign body.

Suction:- Maggots, beads

Methods of removal of foreign body ear (cont.)

LIVING INSECTS:-

Basic principles:-

- First kill the FB by installing oil or spirit in the EAC.
- Oil will suffocate the FB then it will die.
- After death- removal by suction or forceps or syringing.

Foreign body ear (cont.)

Complications:

1.Traumatic rupture of TM.

2. EAC may be injured & swollen.

3. FB may push in the deeper part.

4. Vegetative FB if late- is swollen & suppurates.

5. Vasovagal attack.

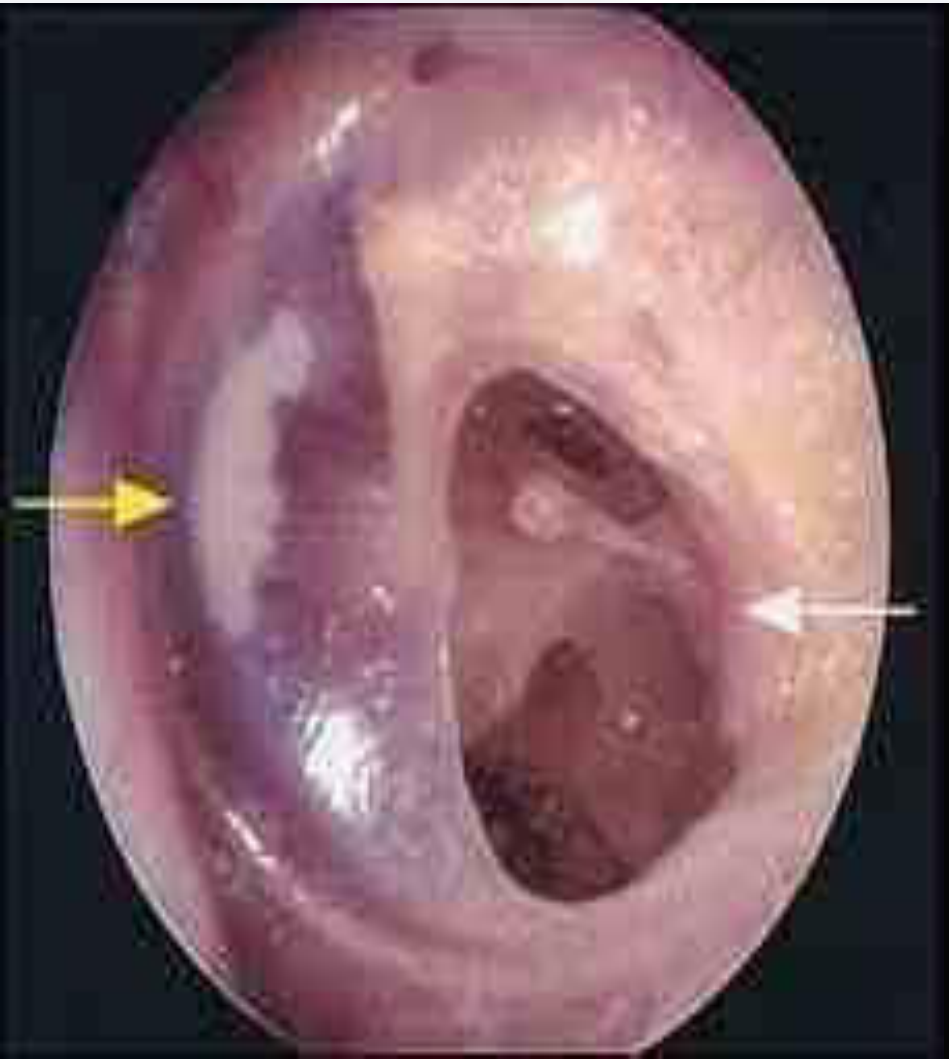
6. Labyrinthine stimulation- vertigo.

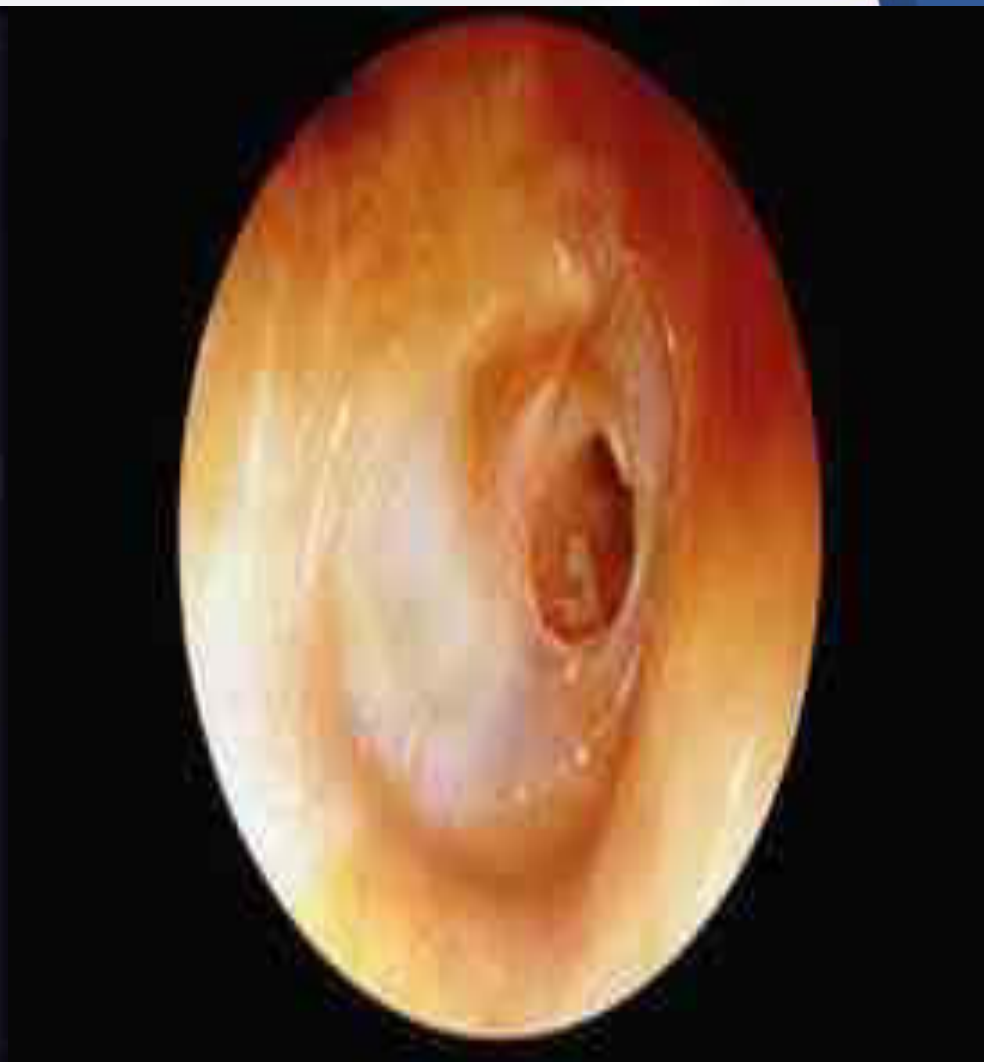
Foreign body ear (cont.)

Maggot's:-

- Syringing is not done to those patients who have CSOM or perforation of TM.
- Chloroform water / Tarpin oil to kill the maggot's which then can be removed by forceps & suction.

Traumatic Rupture of tympanic membrane





Traumatic Rupture of tympanic membrane

Aetiology :

1. Perforation- By FB or unskilled instrumentation or syringing.
2. Sudden air compression- Hand slap, Boxing, Blast or rapid descent in non-pressurized air craft.
3. Sudden fluid compression- In water polo or underwater swimming.
4. Inflation of eustachian tube- Over forceful inflation.
5. Fractured base of skull-
6. Lightening strike- Electric shock > rapid heating of the intra corporal gas > Expansion of middle ear air > Rupture the TM.

Ruptured tympanic membrane

Traumatic Rupture of tympanic membrane (cont.)

Clinical Features:

Symptom:

I. Pain- mainly during rupture.

II. Deafness – mild.

III. Tinnitus and vertigo- Usually transient.

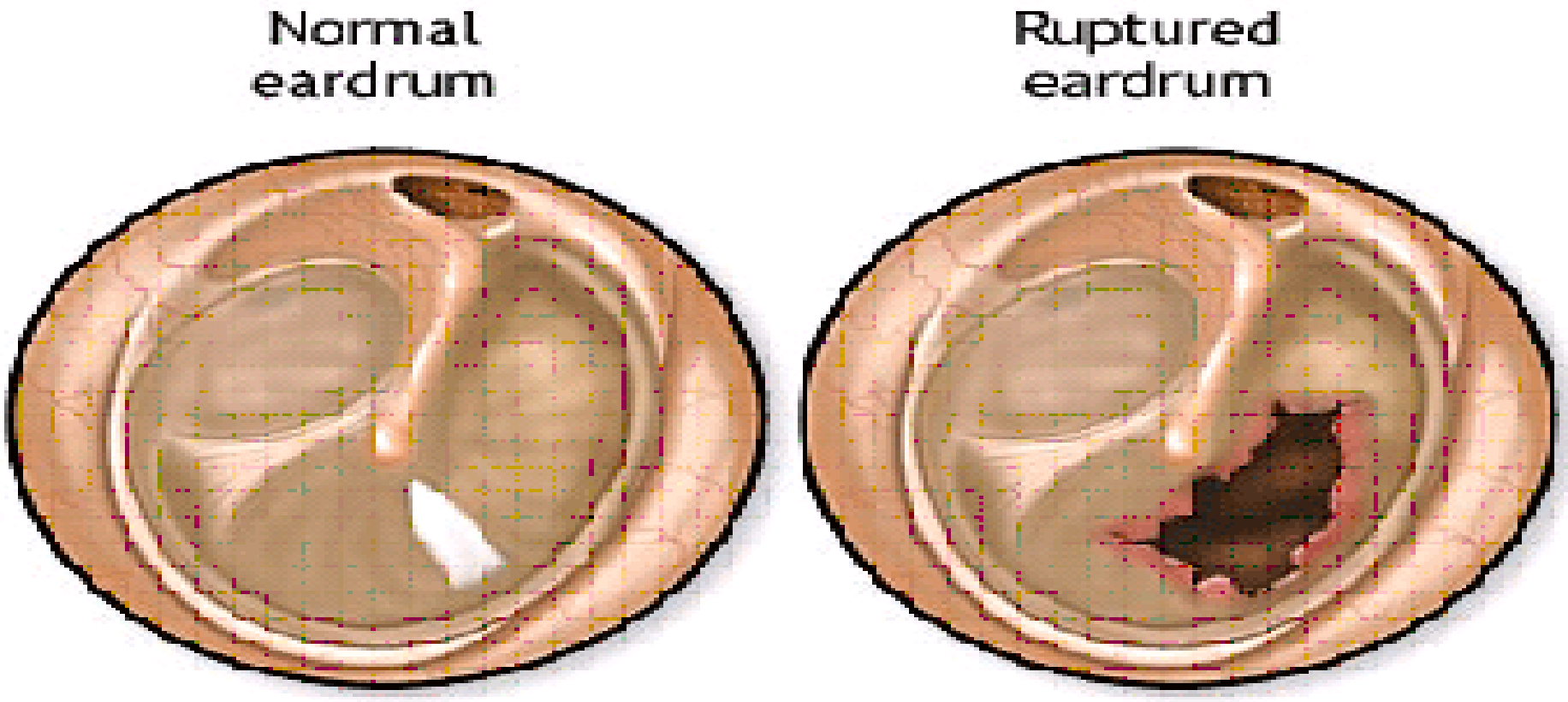
Sign:

i. Blood in the External auditory canal.

ii. Perforation in the tympanic membrane.

iii. Margin is red and irregular.

Traumatic rupture of TM (cont.)



Traumatic Rupture of tympanic membrane (cont.)

- ❖ Treatment:
- ❖ Strict non-interference of the Ear

  No water, no drop, no oil
- ❖ Antibiotic -

- Amoxicillin (500mg) 8hourly 10 days.
- Analgesic – Paracetamol (500mg)1 tab. 8 hourly after meal.

- ✓ Usually heal spontaneously .
- ✓ After 03 month if TM does not heel then Myringoplasty can be done.

Traumatic Rupture of tympanic membrane (cont.)

- If patient comes with Infection of the ear then -

- Antibiotic ear drop (ciprofloxacin ear drop) 3-4 drops 3 times daily for 10 days.
- Pus sent for C/S.
- Treatment of associated disease if any.
- Advice – Avoid water entry in the ear or driving until the perforating heals.

THANK YOU ALL