DISEASES OF EXTERNAL EAR

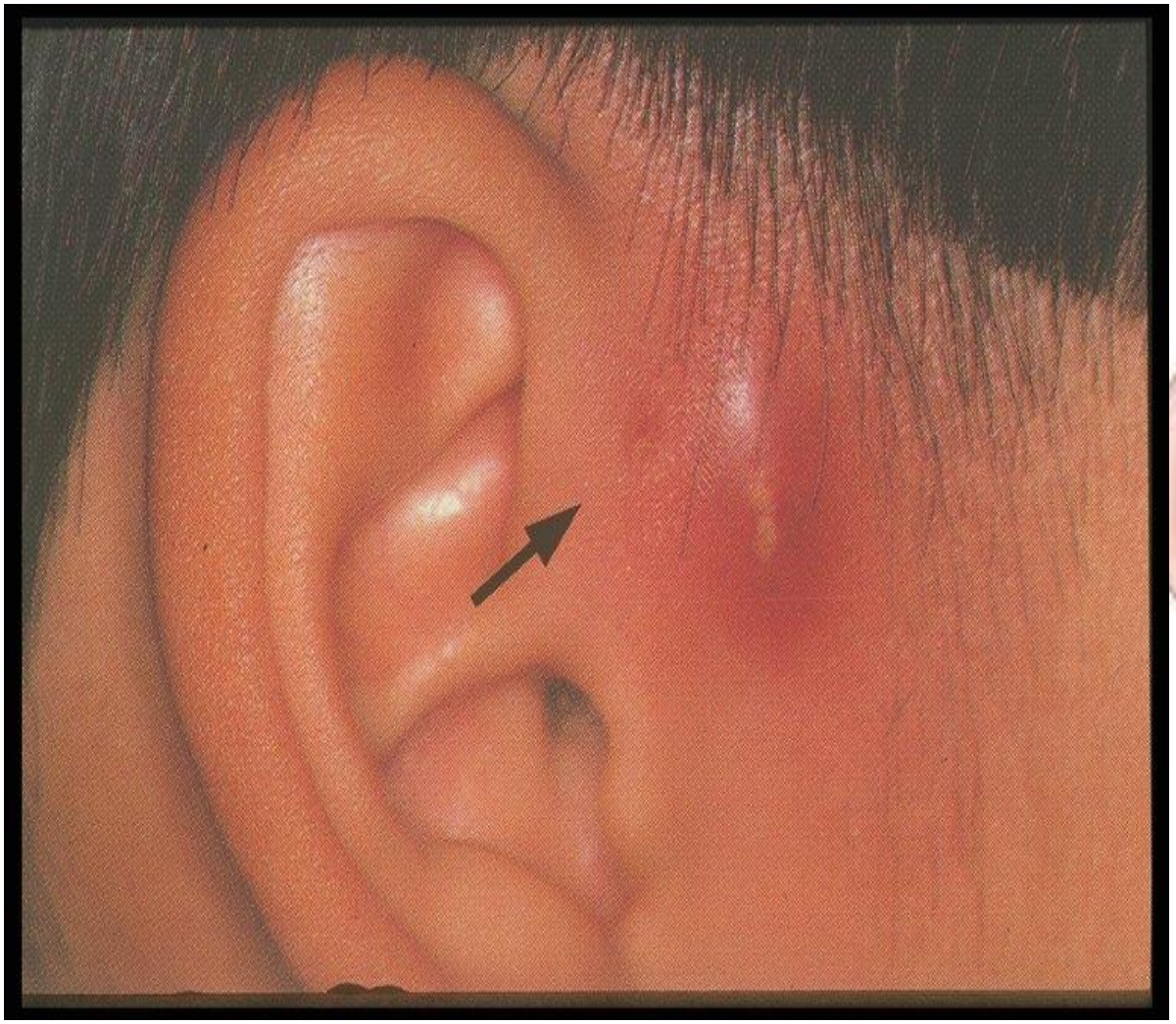
- **Congenital Disorders**

A. Congenital Disorders of ear

1. Bat ear (Lop ear). This is an abnormally protruding ear. The concha is large with poorly developed antihelix and scapha. The deformity can be corrected surgically any time after the age of 6 years, if cosmetic appearance so demands

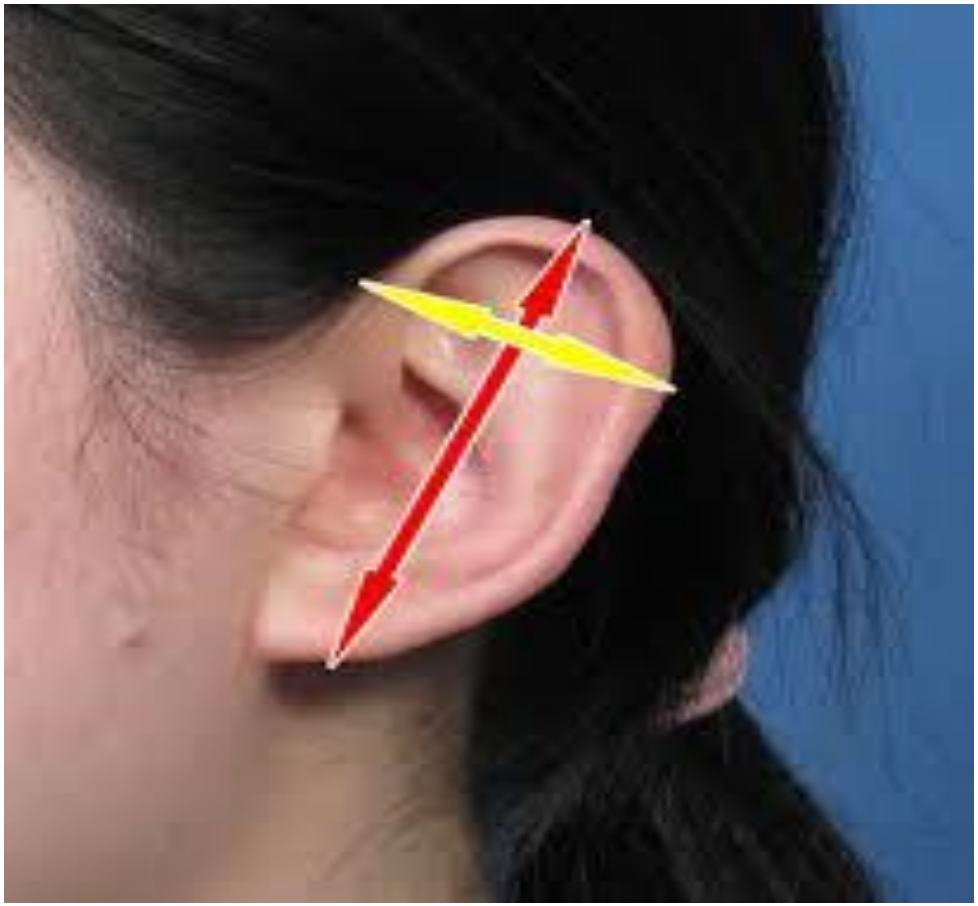
2. Preauricular appendages. They are skin coverd tags that appear on a line drawn from the tragus to the angle of mouth. They may contain small pieces of cartilage

3. Preauricular pit or sinus. This is commonly seen at the root of helix and is due to incomplete fusion of tubercles. It may get repe8tedly infected cauing purulent discharge. Abscess may also form. Treatment is surgical excision of the track if the sinus get repeatedly infected



4. Anotia. It is complete absence of pinna, and usually forms part of the first arch syndrome

5. Macrotia. It is excessively large pinna.



6. Microtia ;It is a major developmental anomaly. Degree of microtia may vary. It is frequently associated with anomalies of external auditory canal, middle and internal ear. The condition may be unilateral or bilateral. Hearing loss is frequent.

B. Congenital Disorders OF EXTERNAL AUDITORY CANAL

1. Atresia of external canal. Congenital atresia of the meatus may occur alone or in association with microtia. When it occurs alone, it is due to failure of canalisation of theectodermal core that fills the dorsal part of the first branchial cleft.

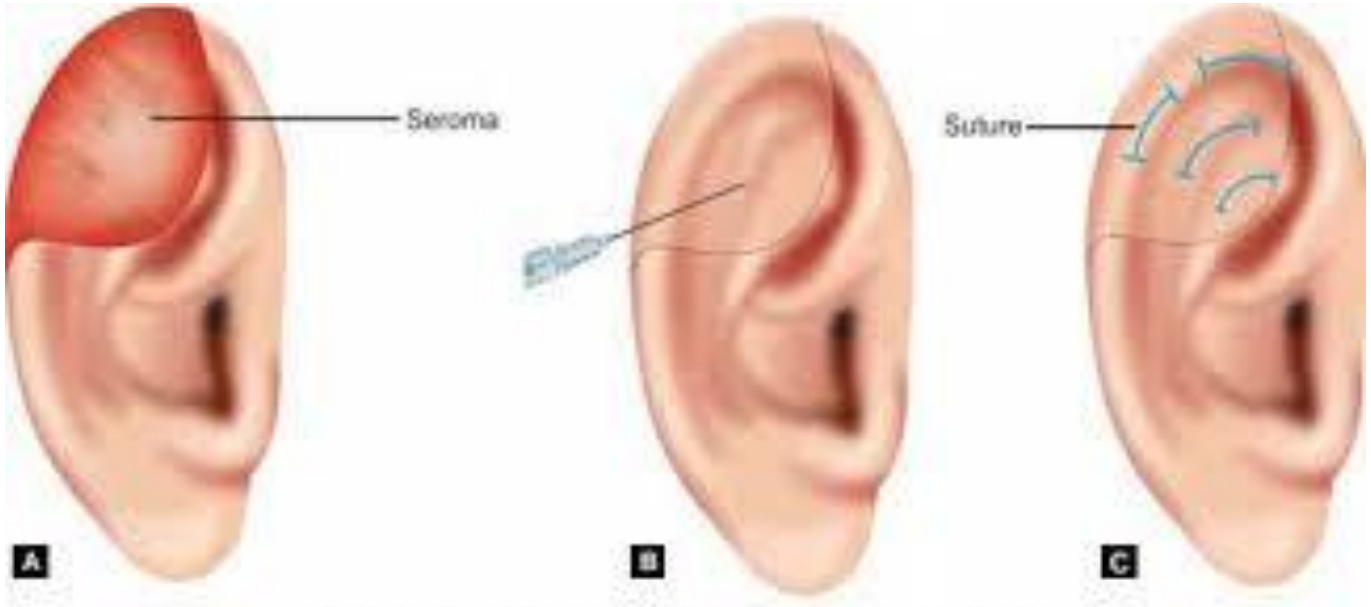
The outer meatus, in these cases, is obliterated with fibrous tissue or bone while the deep meatus and the tympanic membrane are normal. Atresia with microtia is more common. It may be associated with abnormalities of the middle ear, internal ear and other structures.

2. Collaural fistula. Thi, is an abnormality of the first branchial cleft. The fistula has two openings; one, situated in the neck just below ,md behind the angle of mandible, and the other in the external canal or the middle ear. The track of the fistula traverses through the parotid in close relation to the facial nerve.

➢ B. Trauma to the Auricle

1. **Haematoma of the auricle**. It is collection of blood between the auricular cartilage and its perichondrium. Often it is the result of blunt trauma seen in boxers, players. Extra vasated blood may clot and then organise, res in a typical deformity called *Cauliflower ear.* If haematoma gets infected, severe perichondritis may set in.

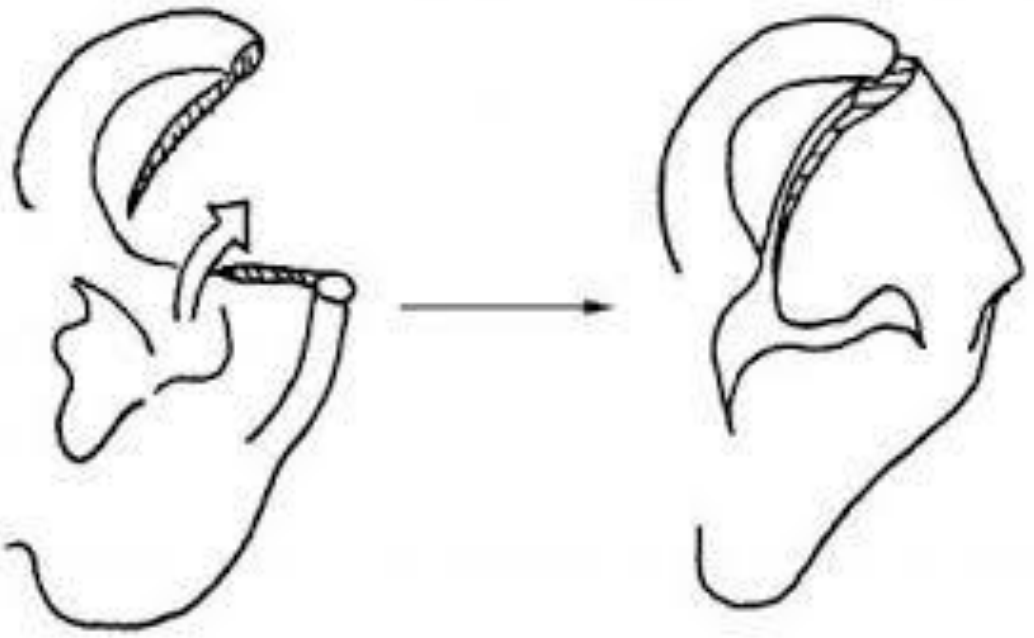
Treatment is aspiration of the haematoma under strict aseptic precautions and a pressure dressing, carefully packing all concavities of the auricle to prevent reaccumulation. Aspiration may need to be repeated. When aspiration fails , incision and drainage should be done and pressure app lied by dental rolls tied with through and hrough sutures. All cases should receive prophylactic dntibiotics.



Figs 1A to C: (A) Seroma, (B) Aspiration, (C) Splint suturing

2. Lacerations . They are repaired as early As possible. The perichondrium is stitched with absorbable Suter . Special care is taken to prevent stripping of perichondrium from cartilage for fear of avascular necrosis. Skin is closed with fine non-absorbable sutures. Broad spectrum antibiotics are given for one week.

3. Avulsion of pinna. When pinna is still attached to the head by a small pedicle of skin, primary reattachment should be considered and it is usually successful. .acompletely avulsed pinna can also be implanted in selected cases by the microvascular techniques; in others, the skin of the avulsed segment of pinna is removed and and cartilage implanted under the postauricular skin for reconstruction.



4. Frostbite.

Injury due to frostbite varies between erythema and oedema, bullae formation, necrosis. Of skin and subcutaneous tissue , and complete necrosis with loss of the affected part.

Treatment of a frost bitten ear consists of:

(a) rewarming with moist cotton at a temperature of 38- 42°C,

(b) application of 0.5% silver nitrate soaks for superficial infection,

(c) analgesics for pain; rapid rewarming of frost bitten ear causes considerable pain,

d) protection of bullae from rupture,

(e) systemic antibiotics for deep infection,

(f) surgical debridement should wait several months as the true demarcation between the dead and living tissues ppears quite late.

5. Keloid of auricle. It may follow truma or piercing of the ear for ornaments. Usual site is the lobule or helix Surgical excision of the keloid usually results in recurrence. Recurrence of keloid can be avoided by pre- and post-operative radiation with a total dose of *600---800* rads delivered in four divided doses. Some prefer local injection of steroid after excision.