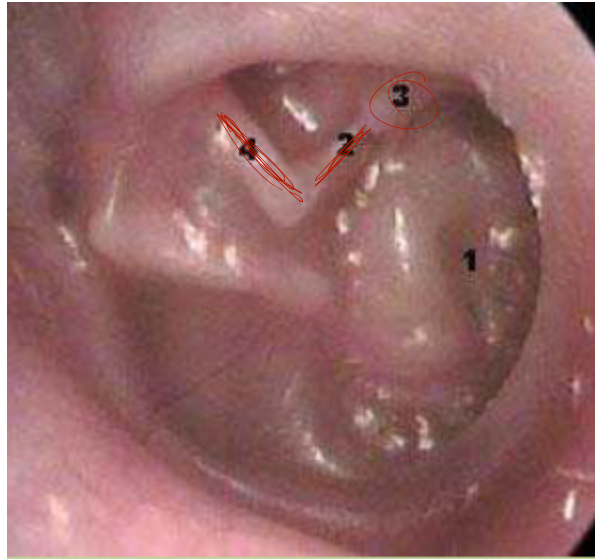


1)



a) Name the numbered structures in the figure:

- ✓ 1. Round window
2. Stapedial tendon
3. ✓ Pyramid
4. Long process of incus

B) Write down the probable causes of bilateral retracted drum:

1. Nasopharyngeal carcinoma
2. Following adenotonsillectomy (Iatrogenic)
3. Cleft palate

C) What is the classification used for retraction of pars tensa ?
Sade's classification.

2)



a)Name the type of pinna seen here

Ans Microtia

b)Name some drugs which when ingested during pregnancy would cause this condition
Warfarin, Folic acid antagonists like methotrexate and aminotriptyne.

c)What are the named pinna deformity ?

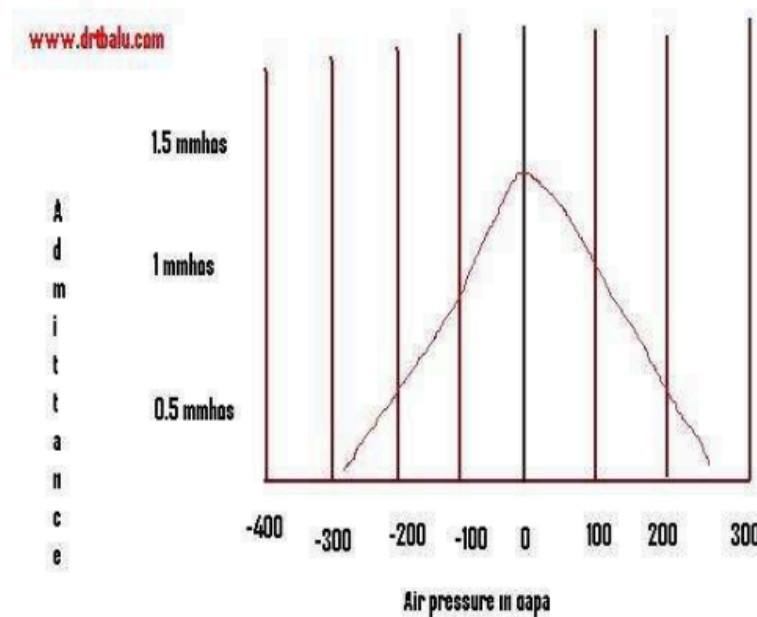
Ans Mozart's ear, Wildermuth's ear, Bat ear.

3) 22 year male patient came with c/o swelling over right pinna - 4 days
Mild pain ++
No h/o fever



- a) Name the possible pathology
Aural seroma
- b) How will you manage this condition ?
 - Needle aspiration with application of compression dressing to prevent reaccumulation.
 - Window procedure
- c) What are the complications of this condition if not treated?
Wrestler's ear, Boxer's ear.

4.



a) What is this image?

It is a tympanometry recording showing Type A curve.

b) What does this curve indicate?

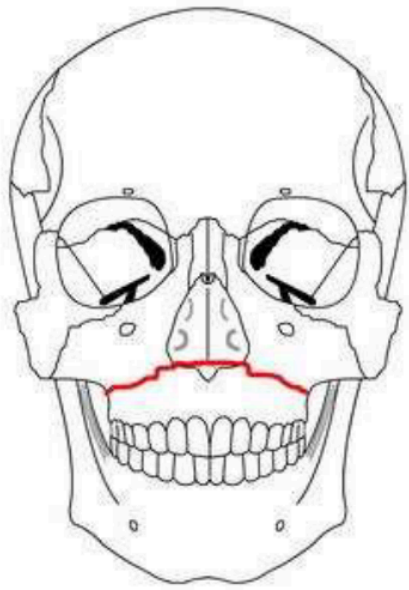
This curve suggests normal middle ear function. The compliance peak occurs between -150 - +100 dapa.

c) Name the cranial nerves whose functions can be tested by using Impedance audiometry
7th cranial nerve and 8th cranial nerve functions can be tested by performing this investigation.

d) Name the tests included under the battery of impedance audiometry:

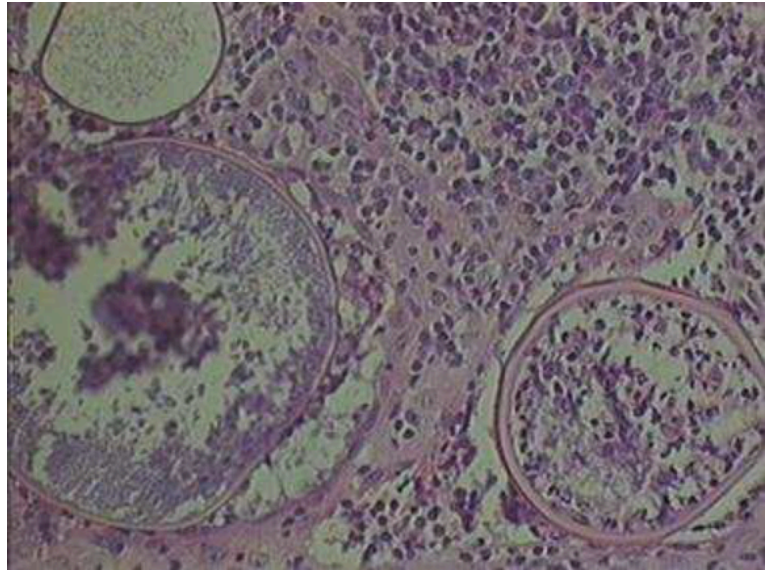
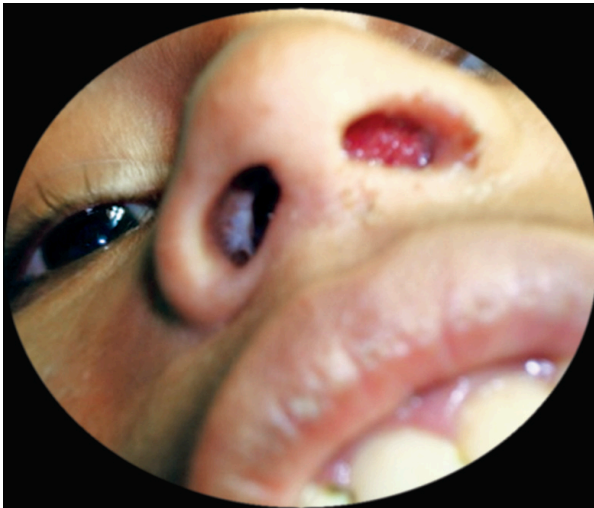
- Tympanometry
- Eustachian tube function
- Acoustic reflex threshold
- Acoustic reflex decay
- Tests to identify perilymph fistula

5)



- a) What type of fracture is this ?
It is a Lefort I type of fracture
- b) Name one synonym for this type of fracture
It is also known as Guerin's fracture
- c) What is the status of palate in this patient ?
Palate in these patients float into the oral cavity

6)



a) What is the Probable diagnosis -
Rhinosporidiosis

b) Comment on this histopathology slide.

This slide shows double walled sporangia containing spores.

Surrounding stroma shows dense collection of inflammatory cells.

c) What is the etiology of this condition ?

It is caused by rhinosporidium seeberi, which is thought to be fungus. Now it is proved to be an aquate protistan parasite. It is included in the class Mesomycetozoea. This class consists of several fish parasites, and is also called DRIP clade, or Ichthyosporidia. Because the organisms could not be cultured easily in any media, this controversy could not be settled.

d) Why is it common in people who take bath in pond?

Common in people where animals and men take bath together. Water gets contaminated by spores through animals.

7)



a) Name this surgical procedure
Caldwell -Luc's operation

b) Name 4 indications of this surgical procedure

1. Recurrent antrochoanal polyp
2. Foreign body in antrum
3. Dentigerous cyst
4. Oroantral fistula
5. Biopsy for tumors of maxilla
6. As an approach to sphenoid, pterygopalatine fossa, orbital decompression

8)



a) What is this surgical position called ?

This is known as Rose position. This position is used in tonsillectomy. In this position there is hyperextension of neck. This is achieved by placing a sand bag under the shoulder of the patient. There is flexion of the atlanto-occipital joint.

b) Name the advantages of this position.

Major advantage of this position is that since the larynx lies at a higher level in comparison with the oral cavity, there is virtually no risk of aspiration. There is excellent exposure of oral cavity and its contents. Both the hands of the surgeon are free.

c) What are the procedures done in this position .

adenotonsillectomy, transpalatine approach for juvenile angiofibroma, Transoral approach for retropharyngeal abscess drainage, styloid process removal in eagle's syndrome.

9)



13 years old boy came with complaints of pain in the throat (intense) 4 days with fever.

a) Describe this lesion.

Acute membranous tonsillitis.

b) Differential diagnosis

1. Agranulocytosis
2. Infectious mononucleosis
3. Diphtheria
4. Oral thrush
5. Acute streptococcal tonsillitis
6. Vincent's angina

c) Comment on the grade of tonsillar enlargement in this case.

Grade IV tonsillar enlargement.

10)



A 12-year-old boy presenting with dysphonia/speech defect since birth. The hearing of the child is normal in both ears.

On examination: The child is unable to protrude the tongue beyond the lower incisors.

There is shortening of the frenulum of the tongue

a) What is the diagnosis ?

Tongue tie / Ankyloglossia

Normally one should be able to protrude the tongue up to half way point between the lower lip and chin.

In patients with tongue tie this is not possible as the tongue is fixed to the floor of the mouth.

b) How do you treat this condition ?

Tongue tie release operation- transverse release and vertical closure

Followed by speech therapy to improve patient's ability to speak normally.

11)



Shown here is a very important step in tracheostomy.

a) What is it ?

Identification of trachea.

b) Why is it being performed ?

This is done by injecting and withdrawing. If air bubbles could be seen inside the syringe on withdrawal of the piston, it confirms that the needle is inside trachea.

The syringe contains 2 % xylocaine. A few drops of it can be instilled into the trachea in order to suppress the cough reflex, which commonly occurs during tracheal incision in tracheostomy

c) Which exact site is the trachea incised ?

Incision is sited between the 2nd and 3rd tracheal rings.

12)



a) Comment on this chest radiograph

This is known as Steeple's sign (The tracheal air column resembles the pointed steeple of a church)

b) What condition could cause this?

This sign is a classic feature of acute laryngotracheobronchitis.

Lateral view neck will help us to rule out acute epiglottitis, if not excluded already clinically. This narrowing occurs in the proximal 1 cm of trachea and may extend up to the level of true cord.

c) What are the clinical Features the patient will present with?

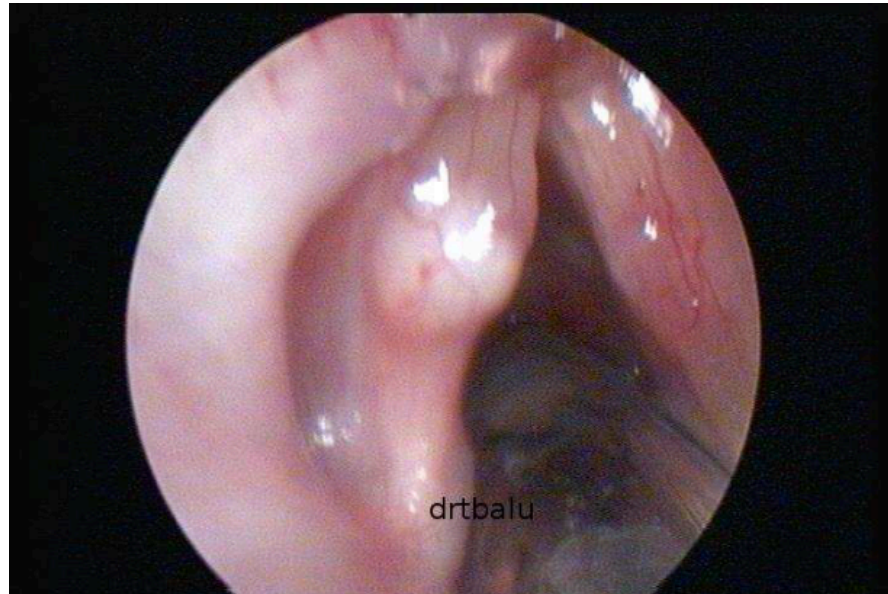
Hoarseness of voice, barking cough, inspiratory stridor, low grade fever

d) causative organisms

Para influenza virus type 1, respiratory syncytial virus (RSV), influenza virus, Adenovirus

13)

A 30 years old female patient came with complaints of hoarseness of voice since 6 months. She gives no history of voice strain/abuse. She gives no history of repeated Upper Respiratory Tract Infection. Videolaryngoscopic image is given below.



- a) What is your impression?
This patient appears to be having a cyst in the right vocal cord.
Probably it is a cordal cyst.
- b) What could be the optimal treatment modality?
Treatment is by microlaryngeal marsupialization of the cyst.

14.



a) Name the incision shown in the picture.

This image shows a Lazy Man S incision/ modified Blair's incision

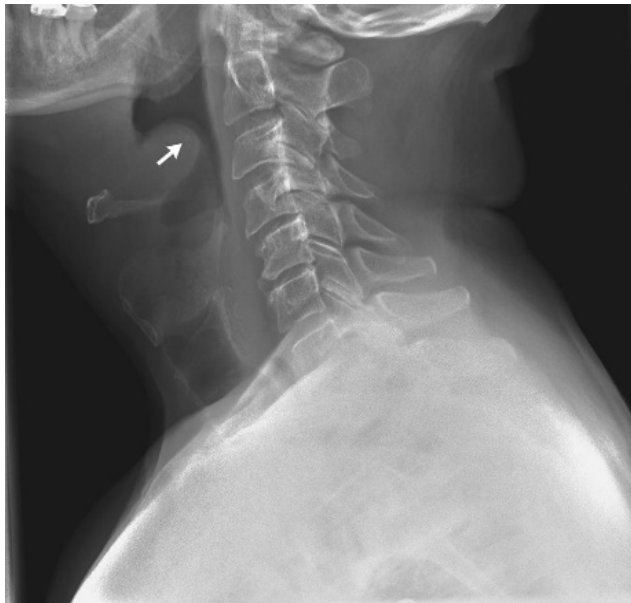
b) Name the surgery in which this incision is used.

This incision is used while performing superficial / total parotidectomy

c) complications related to Surgery

Haemorrhage, hematoma, facial paresis, Frey's syndrome, Wound dehiscence.

15)



a) What is most probable diagnosis?

Acute epiglottitis

b) Name the sign shown in the radiological image

Thumb sign

c) What is the most common organism involved?

Haemophilus influenza type B

d) What is the treatment of choice?

Antibiotics: Ampicillin or third generation cephalosporin.

Steroids: Hydrocortisone or dexamethasone for relieving edema,
adequate hydration,

humidification and oxygen.

Intubation and tracheostomy may be needed if respiratory obstruction occurs.

16)



Patient underwent SMR one year ago, now came with complaints of deformity of nose

- a) What is the deformity shown in the picture ?
Saddle nose deformity
- b) What is your management?
Reconstructive Augmentation Rhinoplasty using grafts like coastal rib, conchal cartilage, iliac crest, Silastic, Mersilene Mesh.
- c) What are the other causes of this deformity ?
Granulomatous conditions like Syphilis, leprosy, Tuberculosis, Traumatic injury, Septal abscess.

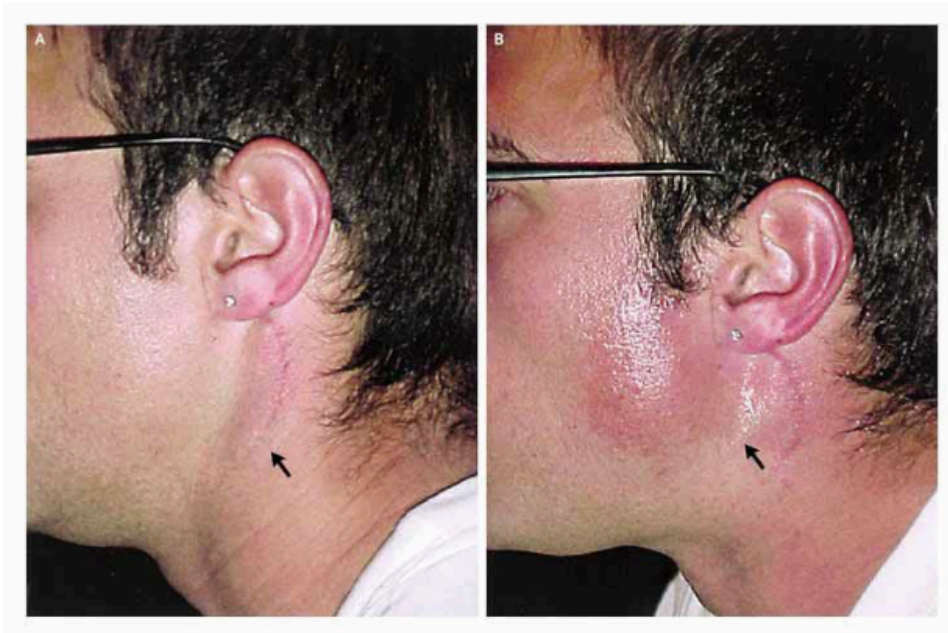
17)



64 year old male diabetic patient with history of sudden onset deviation of mouth and drooling of saliva .presented to opd.

- a) What is the clinical diagnosis?
Left lower motor neuron facial nerve palsy
- b) Etiology?
unclear, but causes postulated are Infections, genetic, immunological and ischemic neuropathy, pathogens like HSV-1, VZV, Influenza B virus, Adenovirus, EBV, Coxsackie virus.
- c) What is Bell's phenomenon
Upward rolling of eyeball on upward gaze.
- d) Topodiagnostic tests for facial nerve?
Schirmer's test, Stapedial reflex, Electrogustometry test, Salivary flow test.

18)



a) Identify the condition
Frey's syndrome

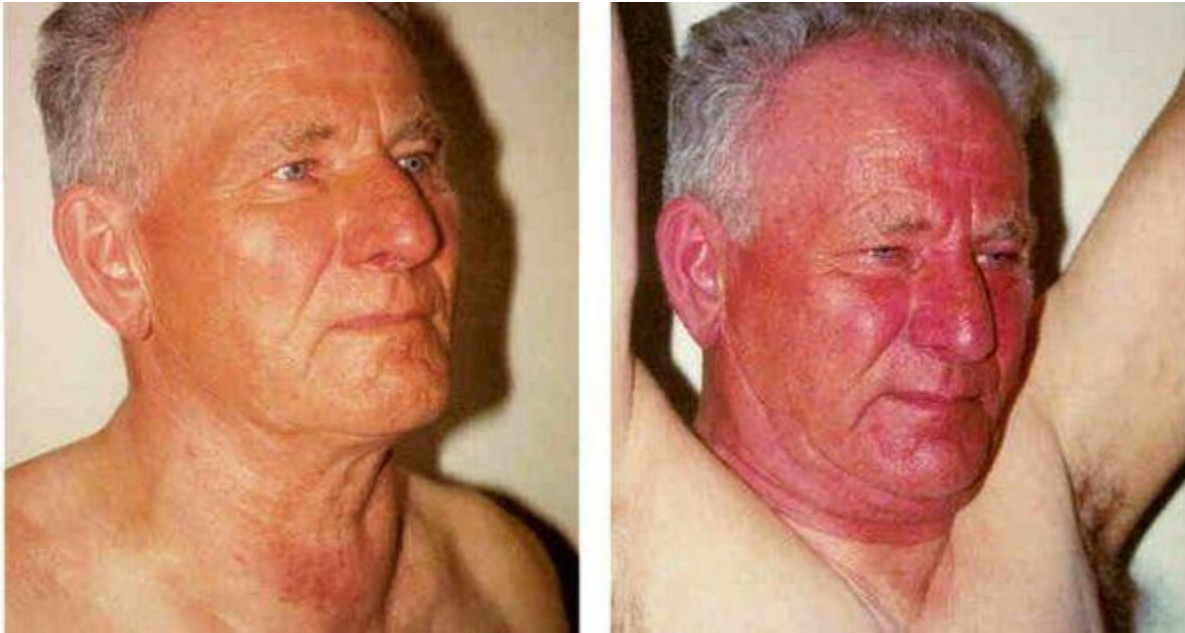
b) Pathophysiology of this condition
Due to erroneous innervation of postganglionic parasympathetic fibers of the auriculotemporal nerve which supplies the parotid gland to the sympathetic fibers supplying the local sweat glands.

c) What test is used to diagnose it?
Iodine-starch test

d) How do you manage this condition?

- Prevented by performing the skin flap - SMAS FLAP(Superficial musculoaponeurotic system) during parotidectomy.
- Surgical treatment-Placing a facial flap (Temporoparietal flap)between skin and parotid tissue.
- Subdermal injection of botulinum toxin .

19)



a) Which is the test being performed ?

Pemberton's sign

b) It is positive in which condition?

Retrosternal goiter , Mediastinal tumours, lung carcinomas

c) Underlying mechanism

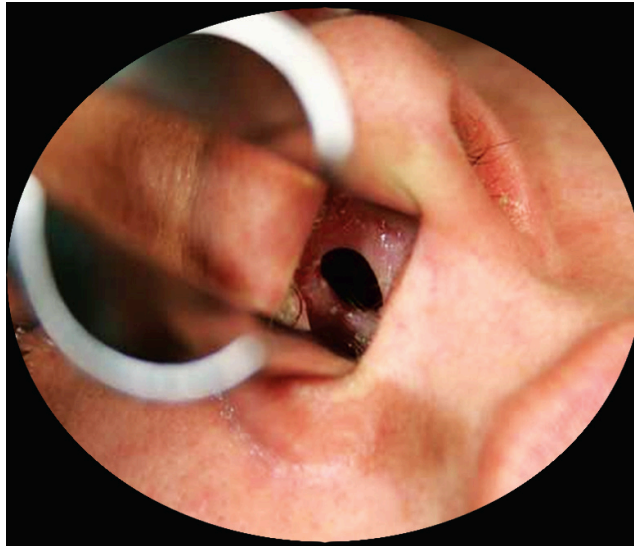
Compression of superior vena cava

d) How do you confirm the diagnosis

Elevation of arm above shoulder level causing facial congestion, redness, cyanosis.

20) A 29-year-old man presenting with whistling sound during breathing since 2 months. He gives history of surgery for deviated nasal septum 6 months back.

Anterior rhinoscopy shows the following



a) What is the most possible diagnosis?

Nasal septal perforation.

b) What are causes for the same?

Trauma is the most common cause for septal perforation. SMR surgery for deviated nasal septum, cauterization of the nasal septum, habitual nose picking, Deliberately perforation of nasal septum for use of ornament.

pathological factors- Septal abscess, nasal myiasis, rhinolith, granulomatous diseases like lupus, TB, leprosy, Wegner's granulomatosis.

drugs - Prolonged use of steroids, cocaine addicts, workers at chromium plating or soda ash.

c) What are the common clinical Features of this condition?

The common clinical presentations are:

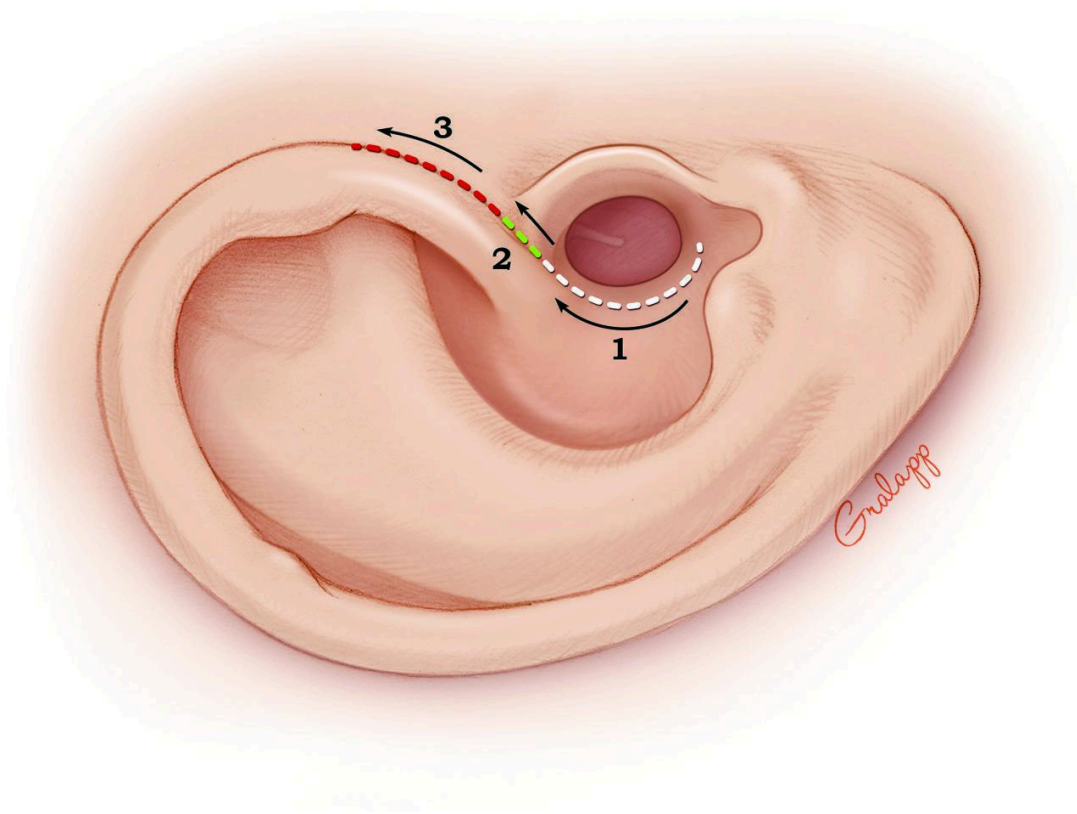
- Small perforations cause whistling sound during inspiration or expiration.
- Large perforations develop crusting which may obstruct the nose or cause severe epistaxis when removed.
- On anterior rhinoscopy, 90% of perforations are seen anteriorly.
- Posterior perforations are seen as result of previous surgery, syphilis or malignancy.

21. A 25 year old female came to casualty with following findings



- a) What is your probable diagnosis
Melkersson -Rosenthal syndrome
- b) What is the clinical triad
Fissured tongue,Oro-facial edema,Recurrent facial nerve palsy
- c) Topodiagnostic tests for the nerve palsy
Schirmer's test,Stapedial reflex,Electrogustometry test,Salivary flow test.
- d) Treatment of this condition
Corticosteroids is the main stay of treatment.
Refractory and recurrent cases may require immunosuppressants drugs like methotrexate
Facial nerve decompression.

22)



- a) Name the incision in above image
Lempert incision
- b) Disadvantage of this incision
Visible scarring, perichondritis.
- c) Used for
tympanoplasty, tympanotomy, ossiculoplasty, stapedotomy/stapedectomy, osteoma
- d) Name other incisions used in ear surgery
Rosen's incision, Postaural Willian Wilde's incision

23)



a) Identify the instrument shown

Nasal endoscope

b) Mention the colour coding used

Green - 0°, Red-30°, Yellow - 70°, Black - 90°

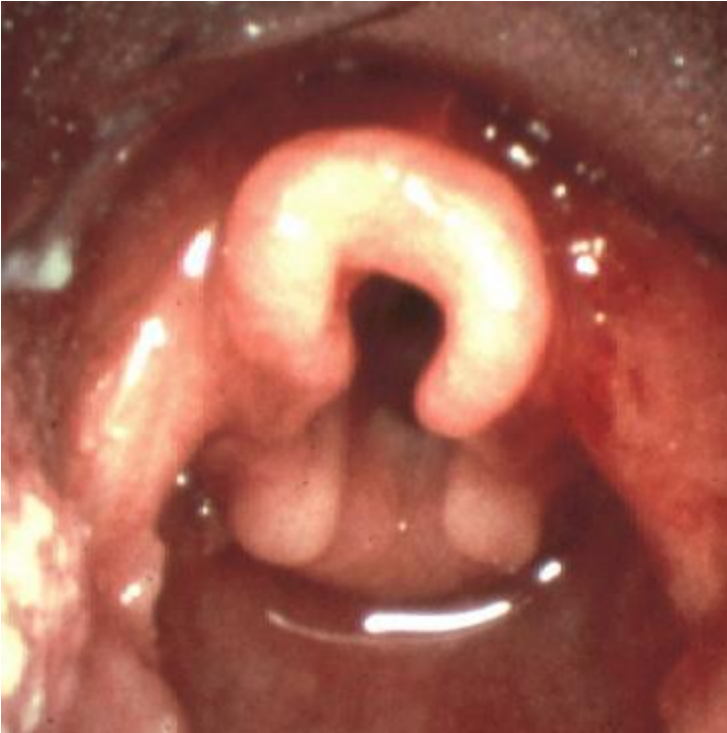
c) What are the uses

In Diagnosis of Nasal disease like Epistaxis, Nasal foreign body, Nasal tumours, Hyposmia or Anosmia, deviated nasal septum, CSF leak,

d) Complications

Epistaxis, Nasal irritation.

24) A 3-month-old child presents with inspiratory stridor and normal cry. Parents tell that stridor disappears when the child is lying prone. Laryngoscopy showed omega-shaped epiglottis with short floppy aryepiglottic folds



- a) Most probable diagnosis?
Laryngomalacia
- b) What are the laryngeal findings in this case
Omega shaped epiglottis with short floppy aryepiglottic folds
- c) What are the treatment strategies in this case?
Most of the children recover by 2 years of age. Hence reassurance of the parents should suffice.

If there is severe respiratory distress then tracheostomy is done and excision of redundant mucosa or splitting of aryepiglottic folds.

25)



a) What is the possible diagnosis?
Ludwig's angina

b) What are Etiology of this condition?

- a. Dental infections: It accounts for 80% of the cases.
- b. Submandibular sialadenitis.
- c. Injury to oral mucosa.
- d. Fractures of the mandible.

c) What are the classical clinical presentations in this case?

- Initially unilateral and progresses to bilateral.
- Pain, odynophagia and voice change.
- Fever, malaise, neck rigidity and trismus.
- Swollen floor of mouth which compromising the airway.
- Patient posture is more erect and tachypneic.
- Submandibular and submental regions are tense, swollen and tender.

Floor of the mouth is tense, indurated, massive mucosal swelling which protrudes over the edges of the lower teeth.

- Tongue is pushed superiorly.

26) A patient presents to the ENT OPD for a midline neck swelling which moves with deglutition and on protrusion of tongue. On Neck examination, A small nodular swelling at the upper part of the neck, below hyoid bone in the midline. It has cystic to firm consistency and the swelling moves up with deglutition and with protrusion of tongue.



a) What is the most possible diagnosis?

Thyroglossal cyst

Thyroglossal cyst is a cyst arising from persistent thyroglossal duct.

b) What is the treatment ?

Sistrunk's operation. It is the excision of the tract from the skin to the base of the tongue including body of the hyoid bone.

c) What are the differential diagnosis?

Dermoid cyst, infected lymph node, lipoma, minor salivary gland tumor, sebaceous cyst, cartilaginous tumor of the thyroid, hypertrophied pyramidal lobe.

27) A 3-year-old boy inserted a portion of chalk into his right nostril. Parent of the child brought him to outpatient department of otorhinolaryngology.
On examination: Showed a whitish chalk piece is inside the right nostril.



- a) What are the symptoms the patient will present with?
Unilateral foul smelling discharge, epistaxis
- b) How will you manage this case?
The foreign body is removed with the help of nasal foreign body hook.
- c) What are the different types of foreign body in the nose ?
Common foreign bodies may be organic such as wood, paper, cotton, foam or rubber and inorganic such as metal, button, beads and plastic.

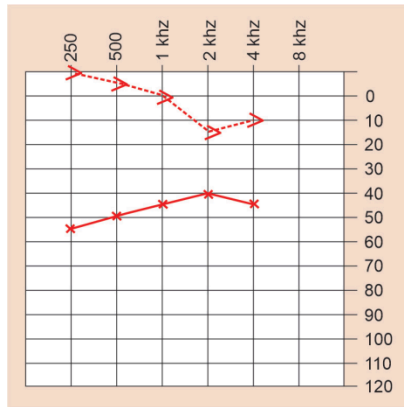
28)



- a) What is the possible diagnosis in above case?
Ethmoidal polyposis.
Ethmoidal polyposis arises from the multiple air cells of the ethmoidal labyrinth. They present as multiple, bilateral and grape like masses.
- b) What are the characteristic features of this on anterior rhinoscopy?
Small multiple grayish whitish mass (grapes like masses), soft in consistency, do not bleed on touch, insensitive to touch.
- c) What are the investigations done in this case?
X-ray paranasal sinuses, diagnostic nasal endoscopy and CT scan of paranasal sinuses.
- d) Treatment of this case
Functional endoscopic sinus surgery with polypectomy under general anesthesia.

29) A 28-year-old lady presented with bilateral hearing loss since 2 years since her pregnancy, slowly progressive in nature. No history of ear discharge. She gives Family history of hearing loss in her mother since young age.

Pure tone audiogram of the patient given below



a) What is the most likely diagnosis?
Otosclerosis.

b) What is Paracusis Willisii?

Patient of otosclerosis hears better in noisy environment. This is because in noisy surrounding people tend to raise their voice which is well above the threshold of hearing for the patient. More importantly this patients do not perceive the background noise, which act as masking noise in normal individuals.

c) What are the examination findings in this case?
Commonly normal tympanic membrane.

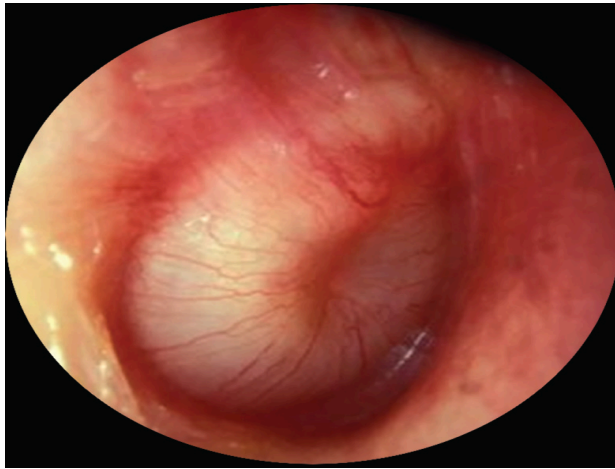
In active otosclerotic focus there is vascularization of promontory which is visualized as a flaming pink discoloration of the tympanic membrane, called **Schwartz's sign**.

d) What is the finding seen on pure tone audiometry?

Conductive hearing loss with dip at 2000 Hz - Carhart's notch

30) 4-year-old boy complaining severe pain in the right ear since last night. He has history of common cold since last 5 days. General physical examination: The child is well oriented with time, place and person. Pulse rate: 92 BPM. Blood pressure: 108/70 mmHg.

Facial nerve examination: Bilateral facial nerves are normal.



a) What is the most possible diagnosis?

Right side ASOM.

b) Why is this condition more common in infants and children?

Eustachian tube in infants and young children is shorter, wider and more horizontal and thus transmit more infection from nasopharynx to middle ear. Breast or bottle feeding in infant in a horizontal position may force fluids through the tube into the middle ear. The immunity of infant and young children are low which promote more infections in middle ear.

c) What are the common bacteria causing this condition?

Commonest bacterial agents are *Streptococcus pneumoniae*, *H. influenzae* and *Moraxella catarrhalis*.

d) What is the medical treatment?

Drug of choice is amoxicillin (high dose). In resistant cases, amoxicillin plus clavulanic acid or cefuroxime is used.

e) What is lighthouse sign?

In suppurative stage of ASOM, otoscopy shows pulsatile discharge that reflect the light intermittently. This is called lighthouse sign.