ENT Ospes KGMC 2024

Paper M-1 (ENT module)

Table-7: MCQs

Module	Total MCQs
ENT	90

Table-8: OSCE

Module	Total OSCE stations
ENT	15

Paper M-2 (Eye module)

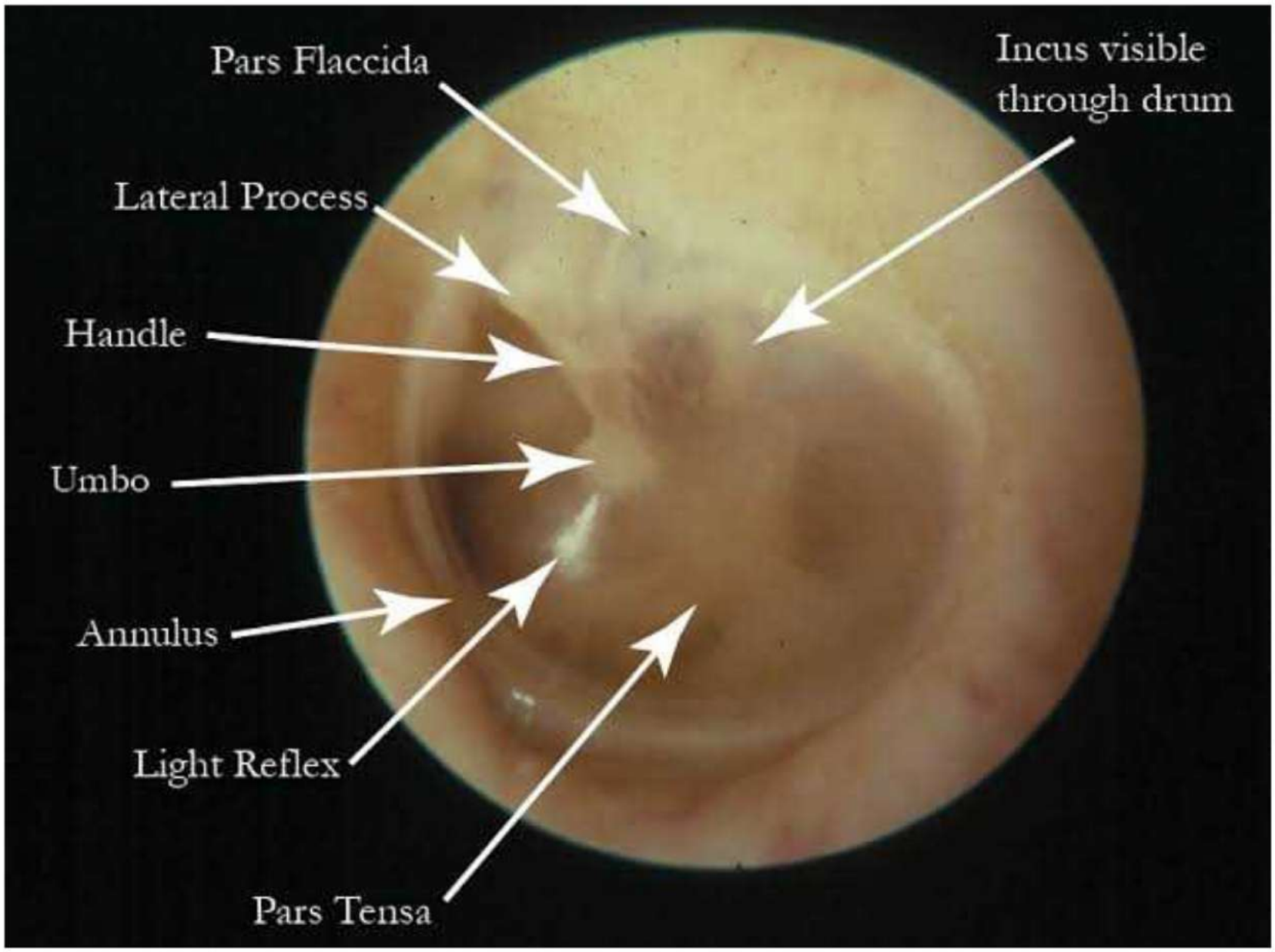
Table-9: MCQs

Module	Total MCQs
Eye	90

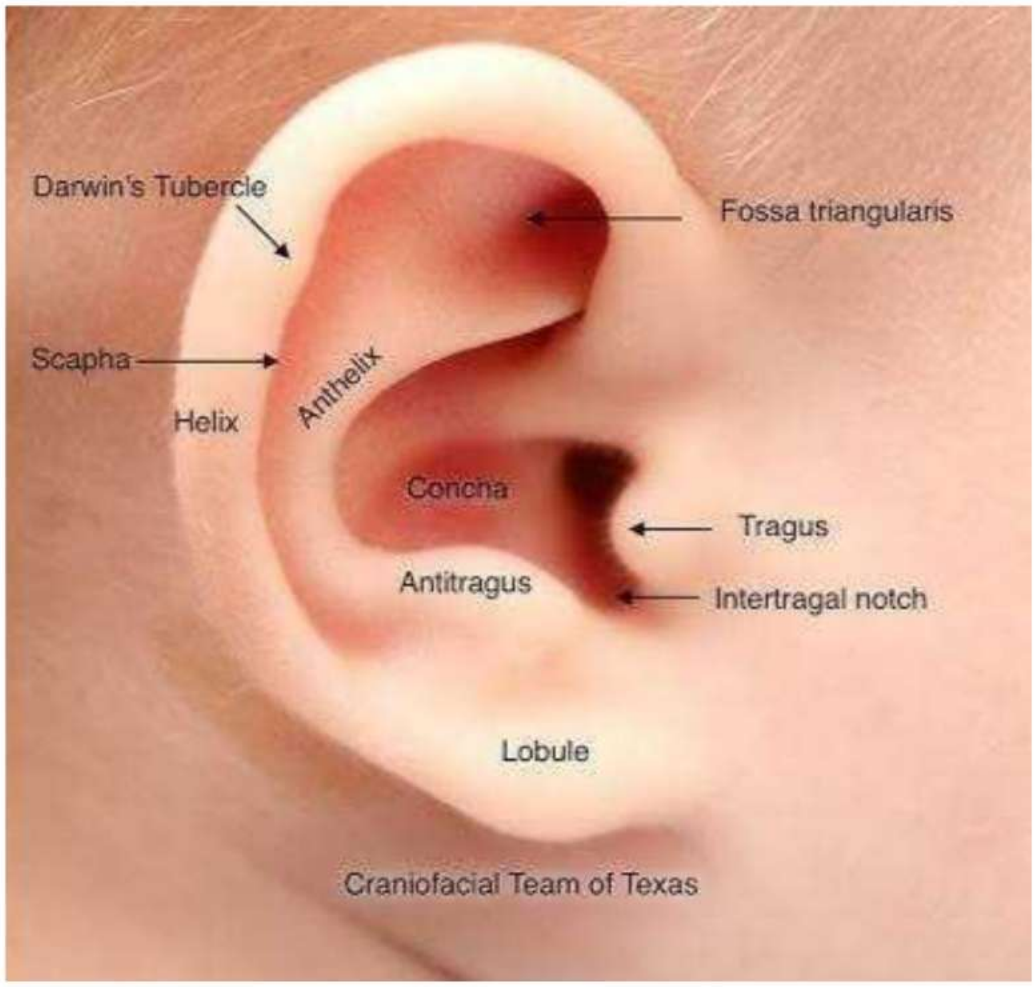
Table-10: OSCE

Module	Total OSCE stations
Eye	15

- For blocks J, K, and L, a minimum of 20 stations will be used in final exams. Total marks will be 120 (6 marks for each station).
- For M-1 and M-2, there will be 15 stations during each assessment with 5 marks per station.



Tympanic membrane


Darwin's Tubercle
Fossa triangularis
Scapha
Anthelix
Helix
Concha
Tragus
Antitragus
Intertragal notch
Lobule
Craniofacial Team of Texas

Superior (posterior) crus of antihelix
Triangular fossa
Helix
Inferior (anterior) crus of antihelix
Scapha
Antihelix, stem
Crus helix
Cymba
Concha
Tragus
Cavum
Antitragus
Incisura
Lobe

Siegel's Speculum

For

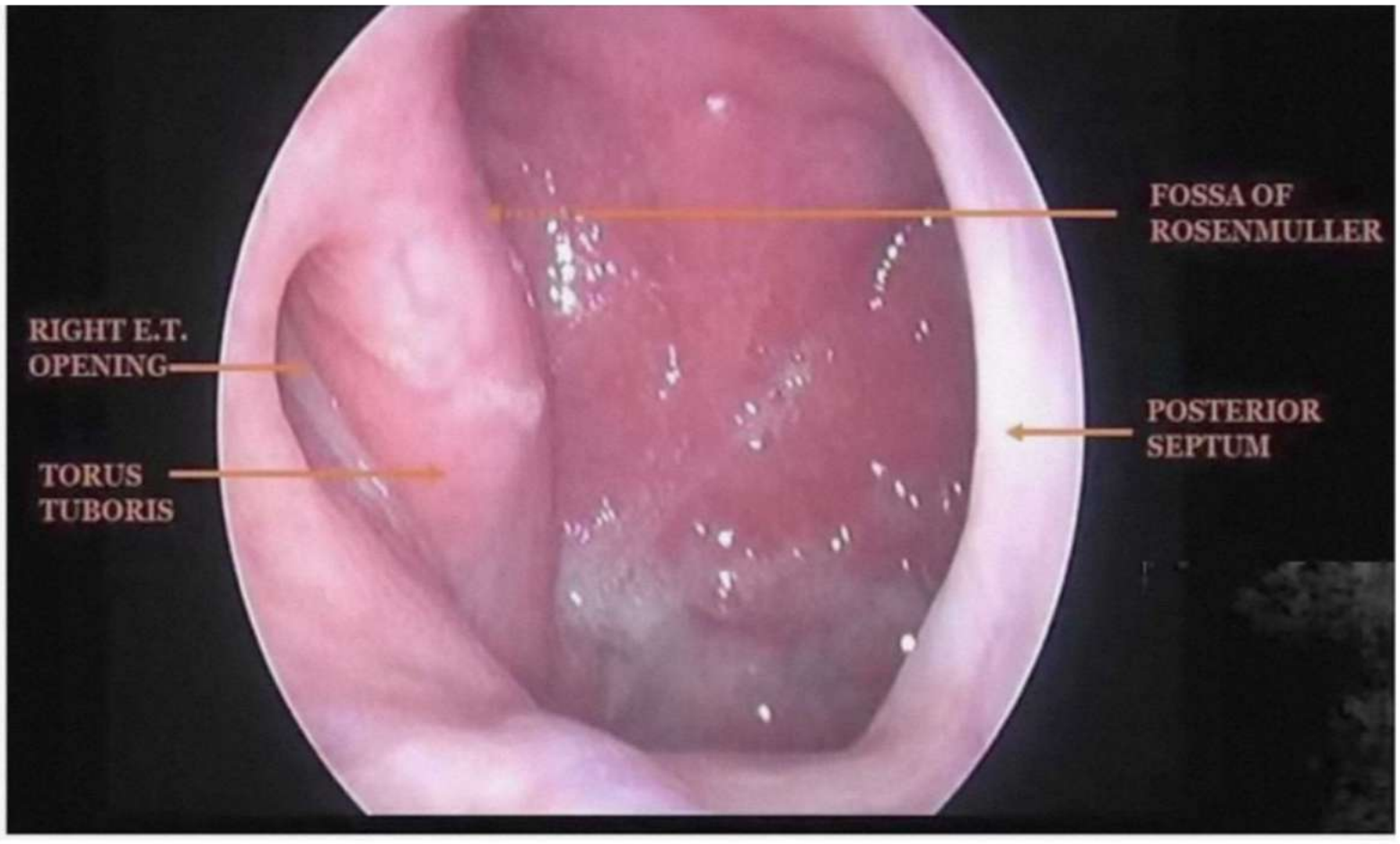
M → Magnification

M → Mobility

M → Medication of Tympanic membrane

G → Gelle's Test

F → Fistula Test



Endoscopy Image of Nasopharynx

- Notice
  - Eustachian Tube opening
    - Torus Tubarius → cartilagenous elevation
  - Fossa of Rosenmuller
    - ↳ depression behind Torus Tubarius

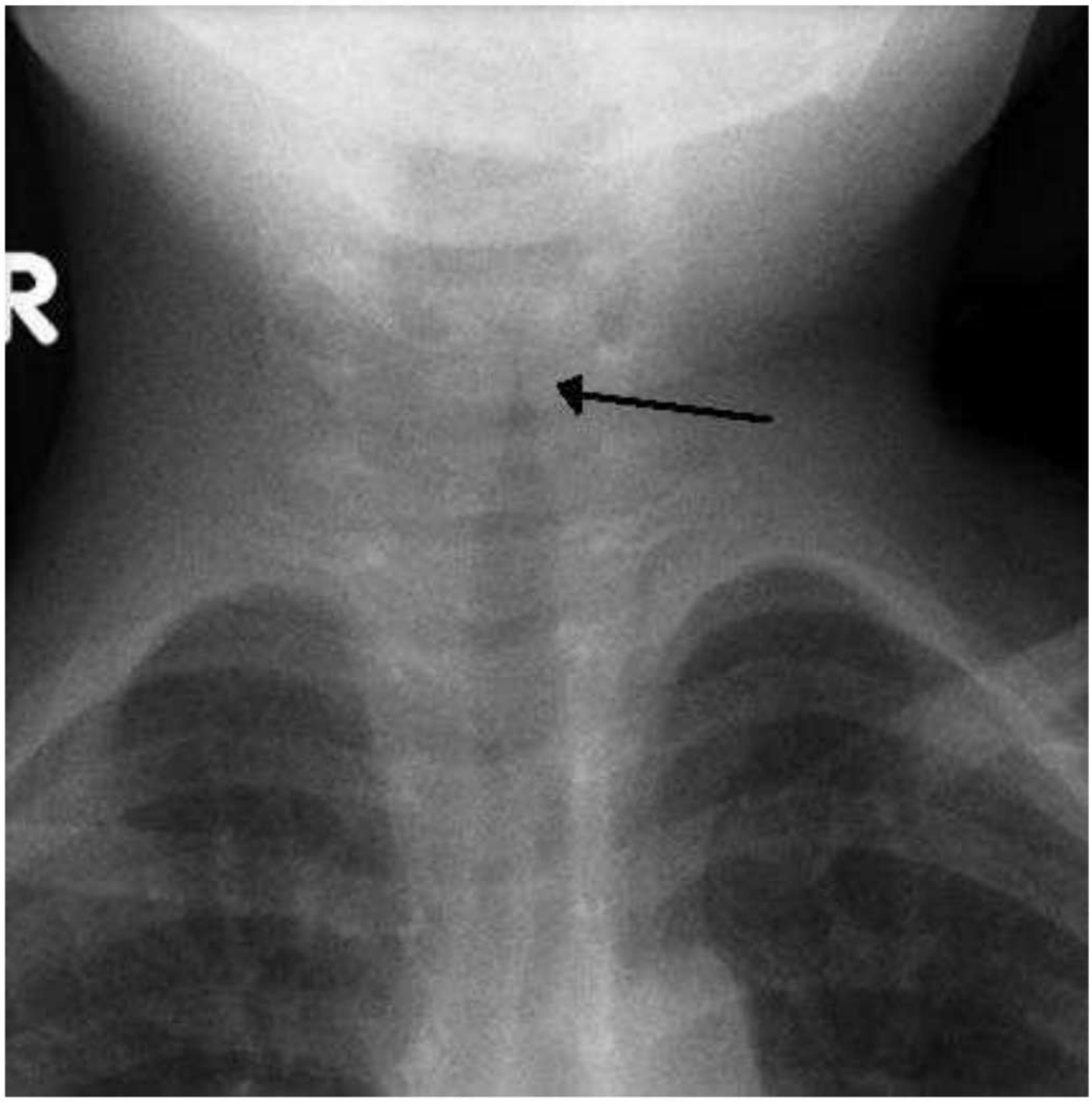
* Sinus Tympani lies medial to facial nerve

* Facial Recess lies lateral to facial nerve

* ICA Anterior to Jugular venous crest

* Jugular Bulb Posterior to Jugular venous crest

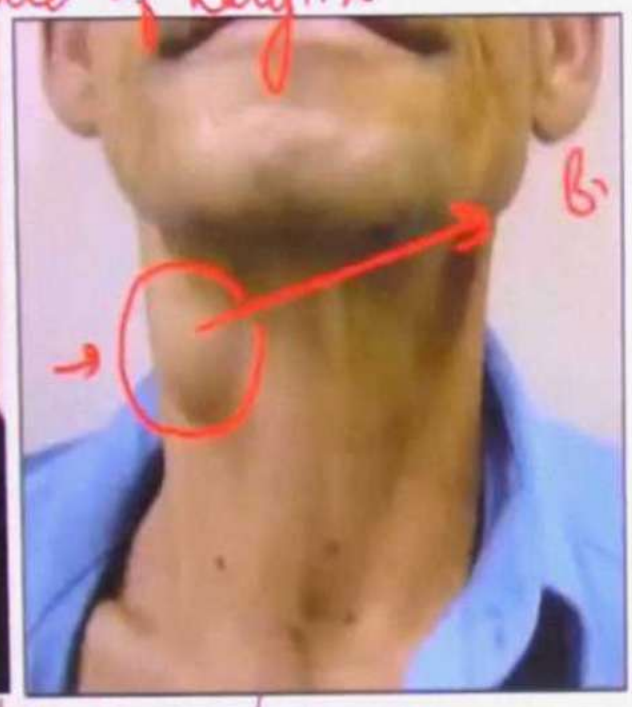
Chest X-Ray



Steeple Sign seen in Croup
(Acute Laryngotracheo bronchitis)

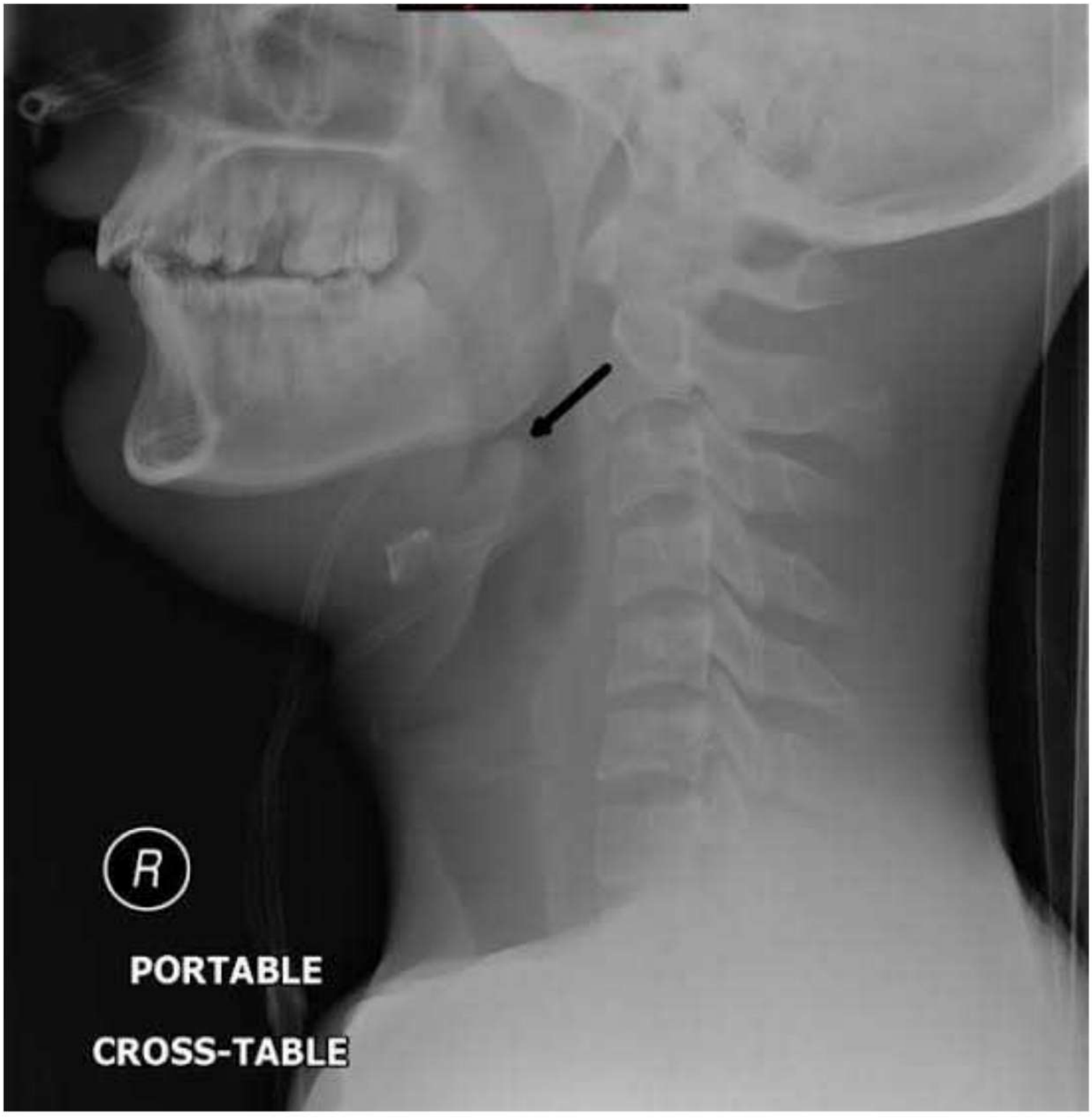
Laryngocoele Air filled cystic swelling

→ Saccule of Larynx



External / Internal / Mixed

Thumb Sign on X-Ray STN



Seen in Acute Epiglottitis

Signs in JNA

Signs in CECT:

- **HOLMAN MILLER SIGN: 80%**
- Anterior bowing of posterior wall of maxillary

- **HONDOUSA SIGN:**
- Widening of gap between ramus of mandible & maxillary body

- Cymba concha is surface (anatomical) landmark of mastoid antrum
- Supra meatal triangle is surgical landmark of mastoid antrum

Part of obj

Nasal polyps

439 slides

- **Definition :**
  - Benign (non cancerous) growth of the mucosa of the nose
  - Nasal polyps are multiple unlike antrochoanal polyps (next page)
  - Nasal polyps have high recurrence rate

- **Etiology :**
  - Exact etiology is unknown
  - Allergy, usually bilateral & multiple, eosinophils & plasma cells in large amounts
  - Inflammation (i.e. infections)
  - Neoplastic (benign) (bleeding polyps of nasal septum/malignant)

- **classification :**
  - Simple nasal polyp (allergy, vasomotor, inflammatory, mixed (allergic-infective)
  - Fungal polyp
  - Malignant polyp

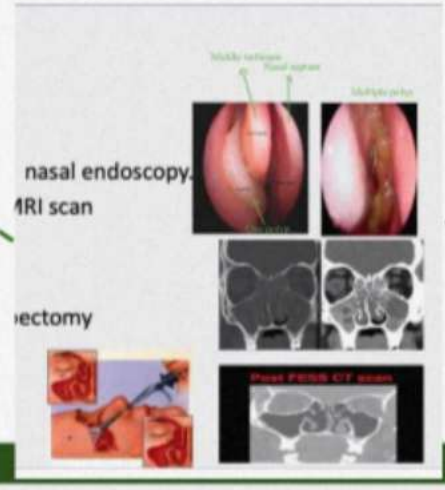
- **Site of origin :**
  - Ethmoidal polyp (most common site, mostly bilateral)
  - Maxillary sinus polyp is the 2nd most common site
  - Unilateral non antrochoanal polyp is a Red flag! It might be a tumor.

Symptoms

- Blocked nose
- Runny nose
- Postnasal drip
- Nasal congestion
- ↓ sense of smell
- Breathing through the mouth
- Sleep apnea
- Snoring
- Pain / headache (because there is no air in the sinus) → headache may also occur if there's sinus infection in addition to the polyp

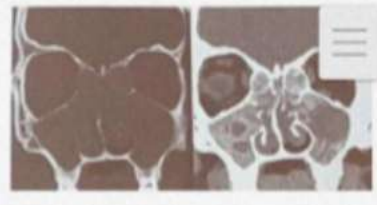
Diagnosis

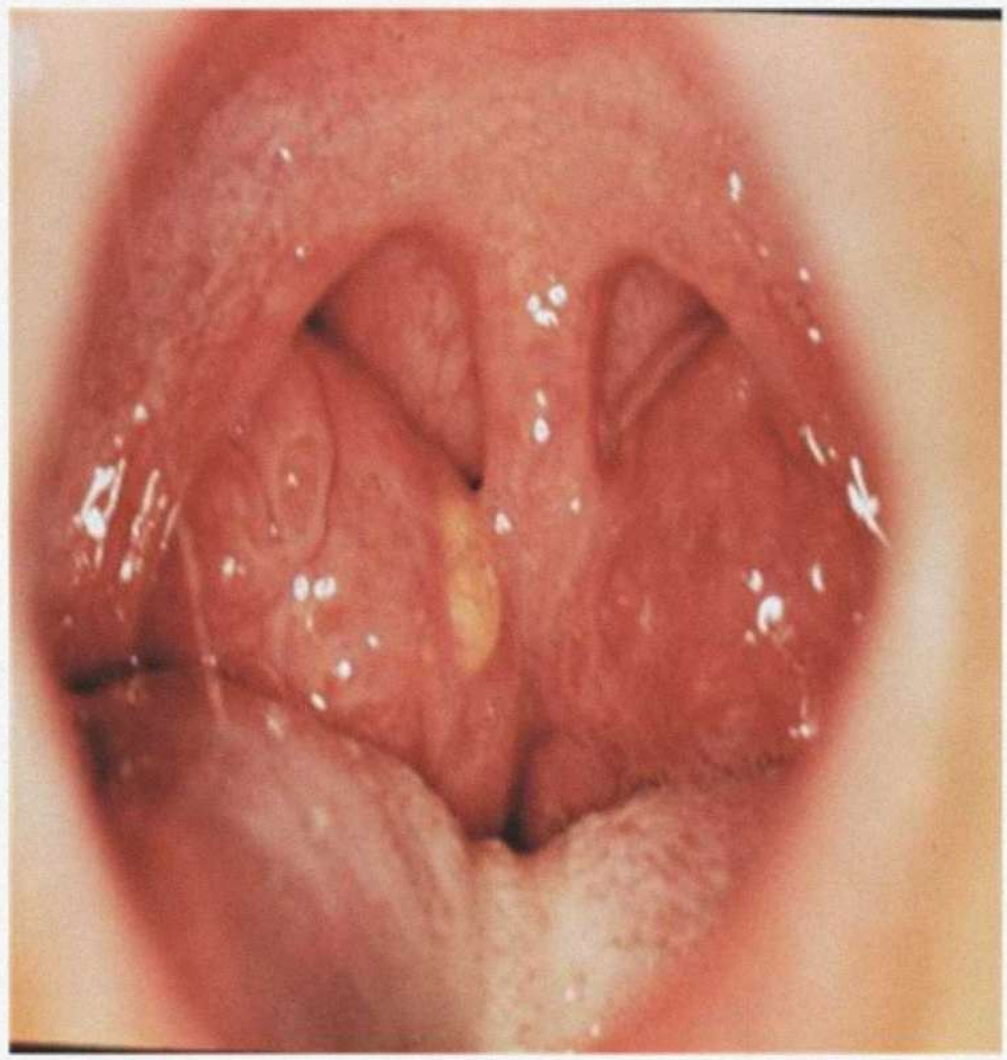
- History of nasal obstruction
- Physical examination of the nose
- CT scan (to see where it extends)
- MRI
- Nasal endoscopy



Treatment

- Functional endoscopic sinus surgery (FESS)
- Surgery-polypectomy (done only in special situations)
- Medication (topical steroid therapy but will not usually disappear)





This is grade 4 tonsils
(kissing tonsils),
they will have
Obstructive sleep apnea

Ludwig's Angina 438 Female

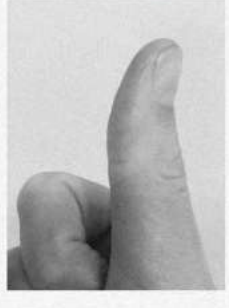
Definition	• **Bilateral cellulitis of submandibular and sublingual spaces**, occurs due to extraction of a tooth that has an abscess without putting him under antibiotic coverage first.
Signs & symptoms	• Wooden floor of the mouth, neck swelling, indurations, drooling, respiratory distress, swollen tongue, dysphagia, trismus
Complications	• Airway distress , sepsis
Treatment	• Tracheotomy (can't intubate because of the tongue) • External drainage • IV antibiotics

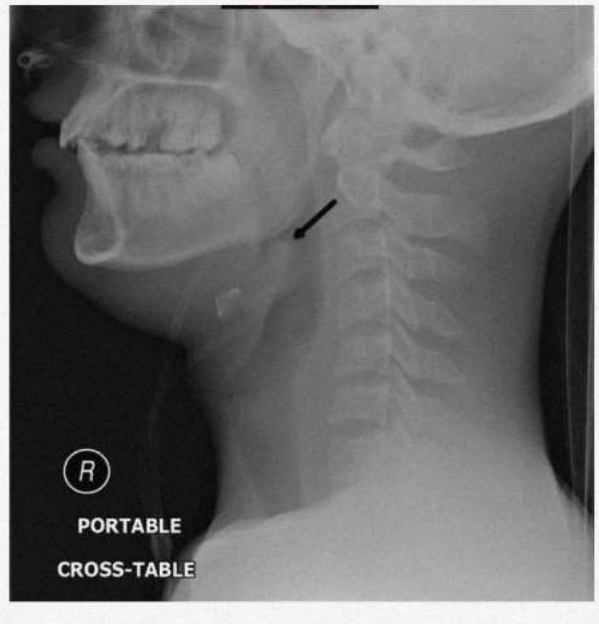
Submandibular swelling that extended below the tongue, pushing to tongue against the soft palate making the patient unable to breath.

• Epiglottitis

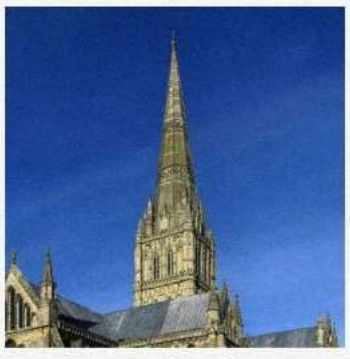
Thumb sign

Classic sign

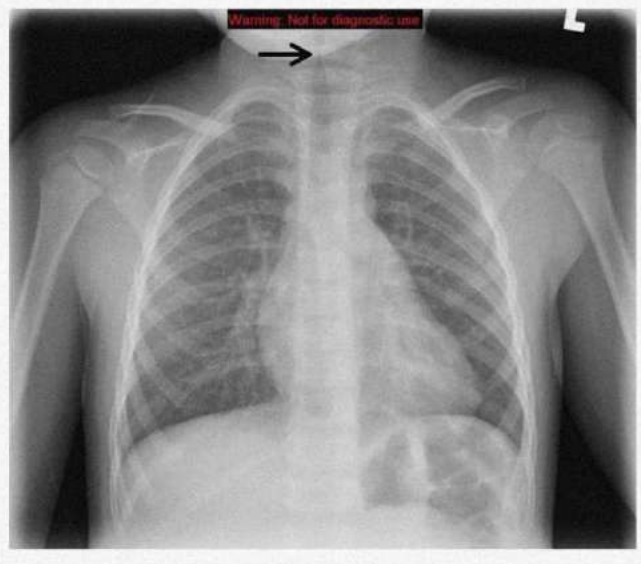


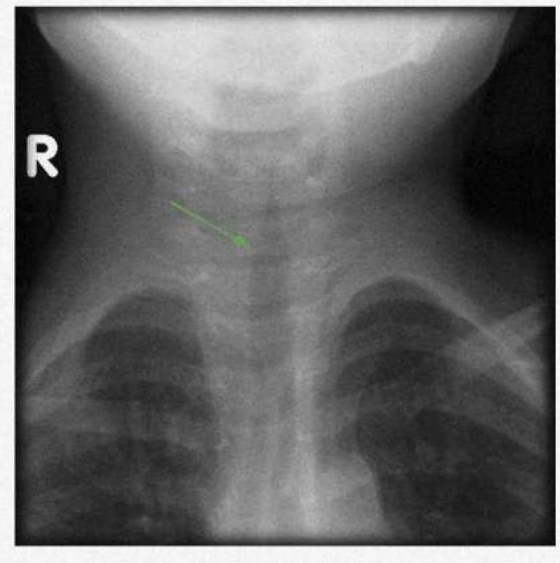


• CROUP:



Steeple sign is classic for croup but can also happen in subglottic stenosis or any other narrowing in the area, that's why it is mainly a clinical diagnosis





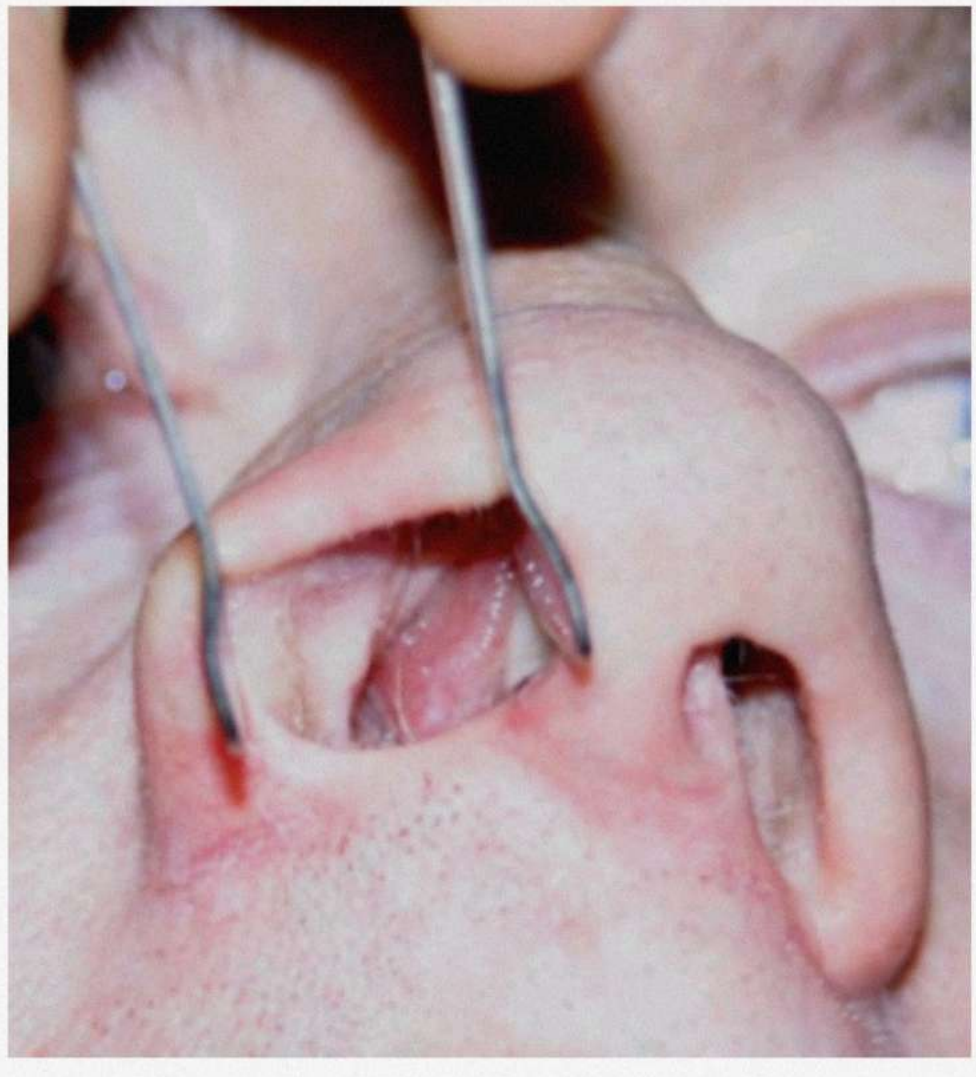


Figure 9: Septal deviation to the right

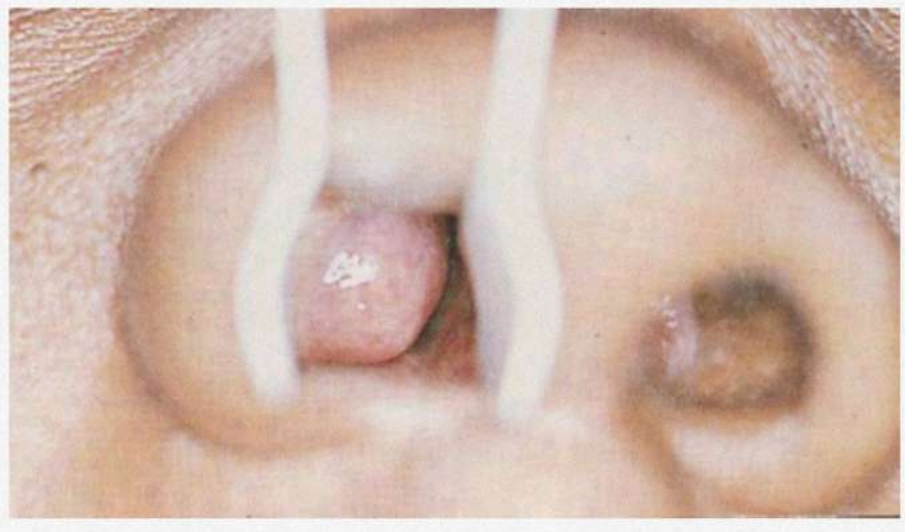


Figure 10: Right Inferior Turbinate swelling due to allergic rhinitis

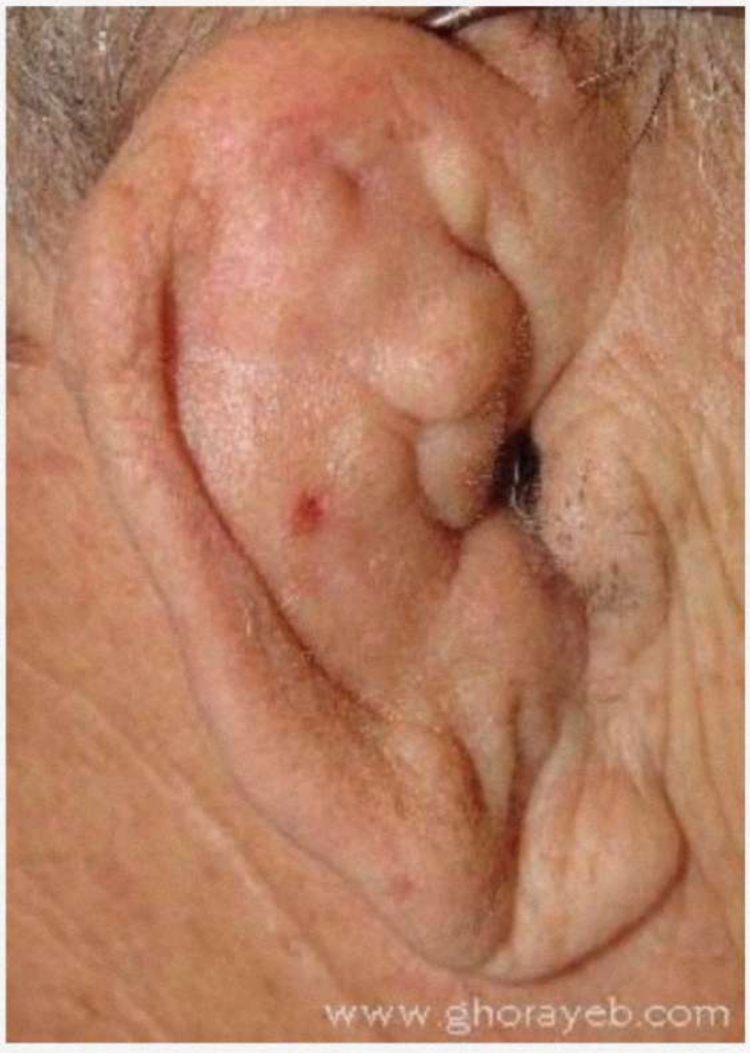
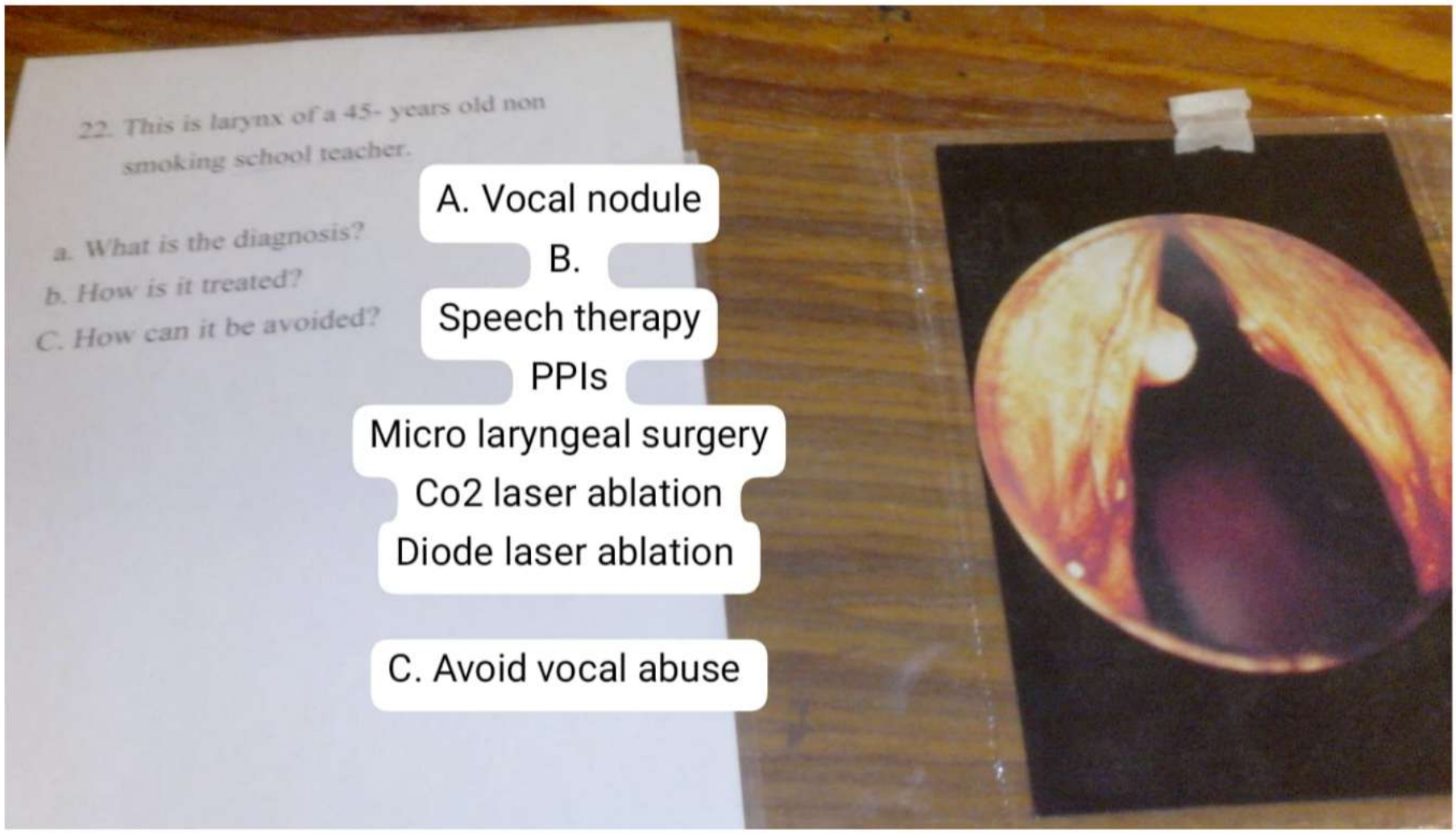


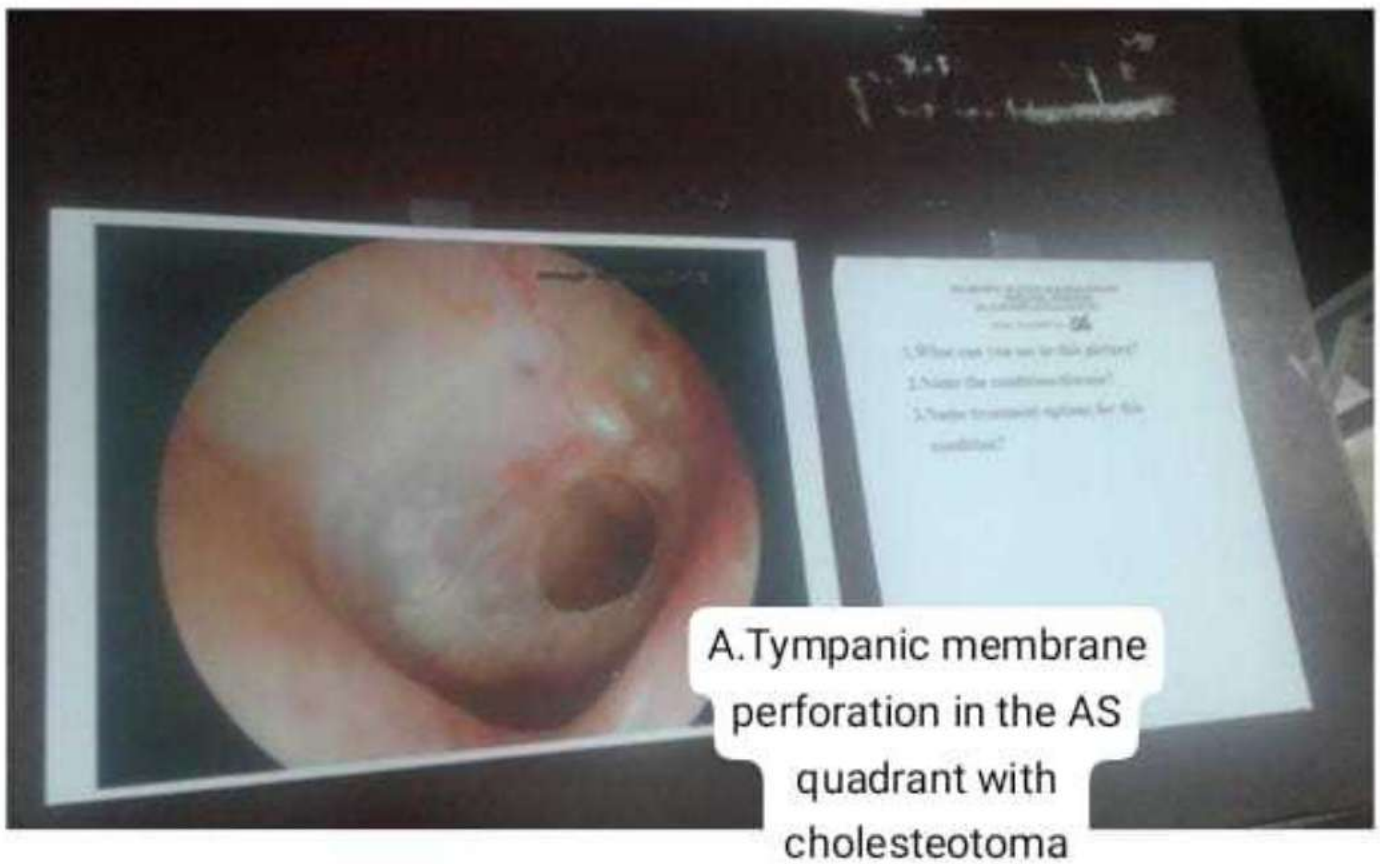
Figure 24: Cauliflower ear (reproduced with permission from Otolaryngology Houston, www.ghoryeb.com)

Figure 32: Right TM perforation (Courtes

Figure 38: Correct method of pinching the nose

Figure 51: Unilateral left cleft lip and palate (Courtesy of Elf-ENT)


22. This is larynx of a 45- years old non smoking school teacher.
a. What is the diagnosis?
b. How is it treated?
C. How can it be avoided?
A. Vocal nodule
B.
Speech therapy
PPIs
Micro laryngeal surgery
Co2 laser ablation
Diode laser ablation
C. Avoid vocal abuse



A.Tympanic membrane perforation in the AS quadrant with cholesteotoma

B.Due to CSOM

C.txt is mastoidectomy with tympanoplasty

* Red bulging TM due to ASOM
  * MC Organism
    - Strep pneumonis
    - Moraxella

21. Prolonged endotracheal intubation can result in vocal cord damage with hoarseness and airway compromise following extubation.

a. What is the pathological process involved in this instance?

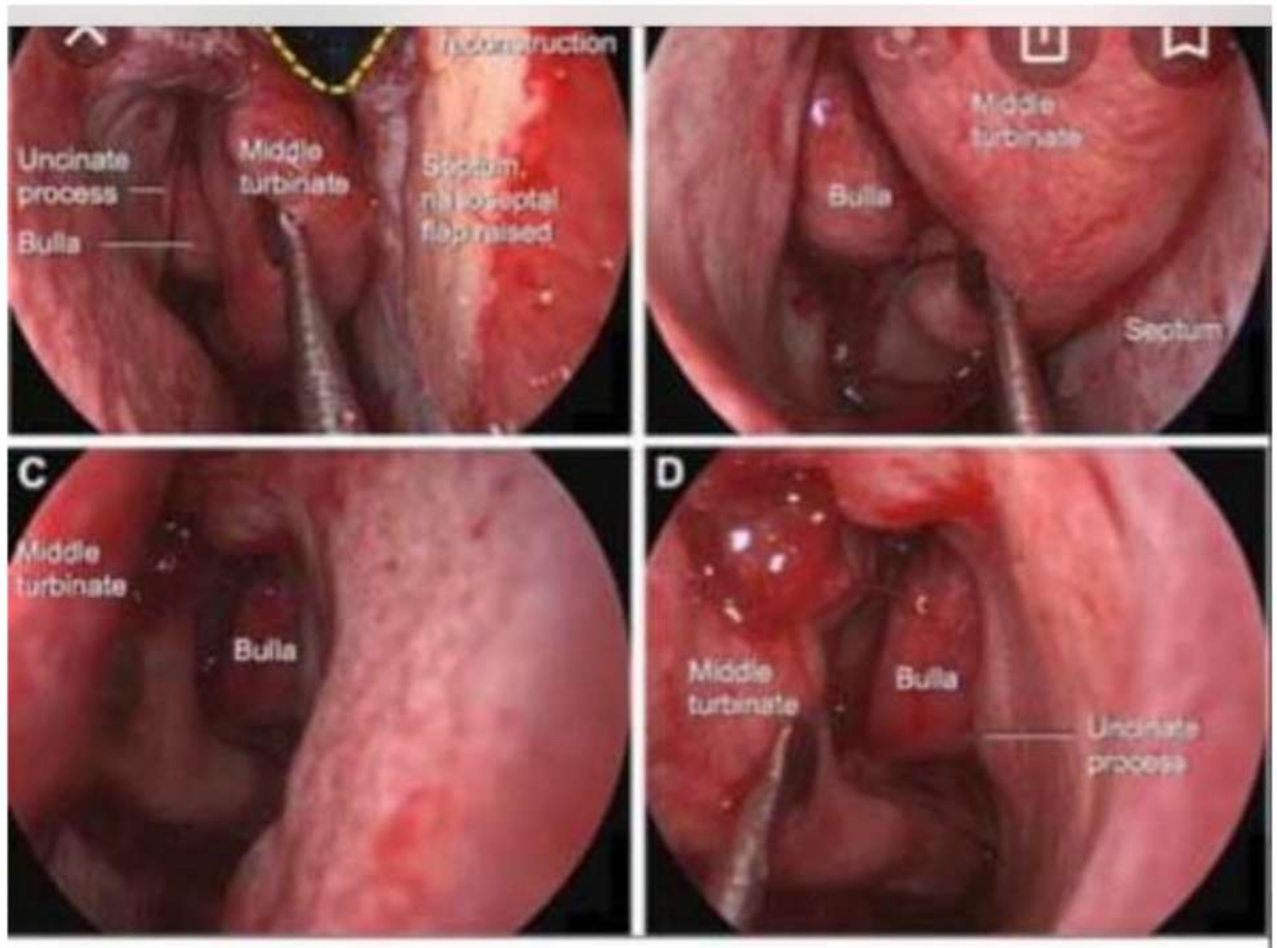
b. How can this situation be avoided?

c. How is it best treated?

A- Inflammation
Granuloma Formation
Ulcer
Fibrosis
Fistula

B. By deflating bulb of ET tube to prevent pressure ischemia and necrosis

C- Micro laryngeal Surgery
Micro Debribement
CO_2 Ablation



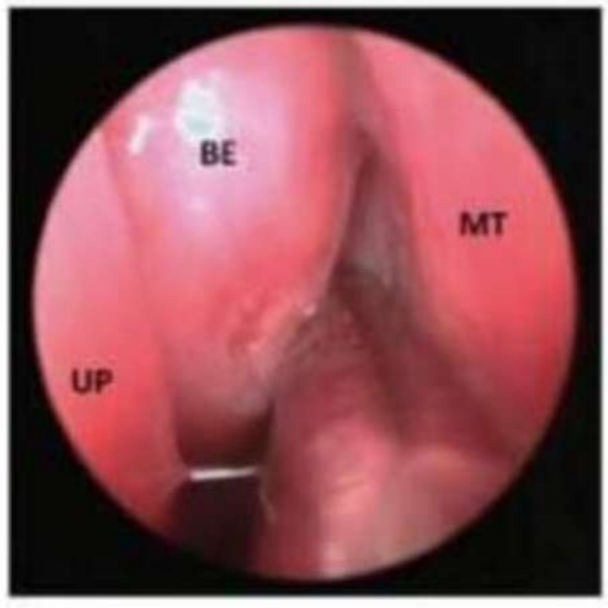
ScienceDirect.com

Visit

Endoscopic Superior Ethmoidal Approach for Anterior Cranial Base ...

Images may be subject to copyright. **Learn more**

Related images

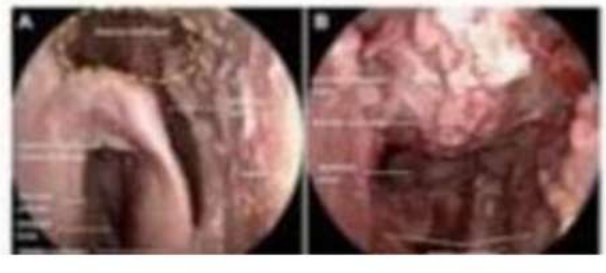


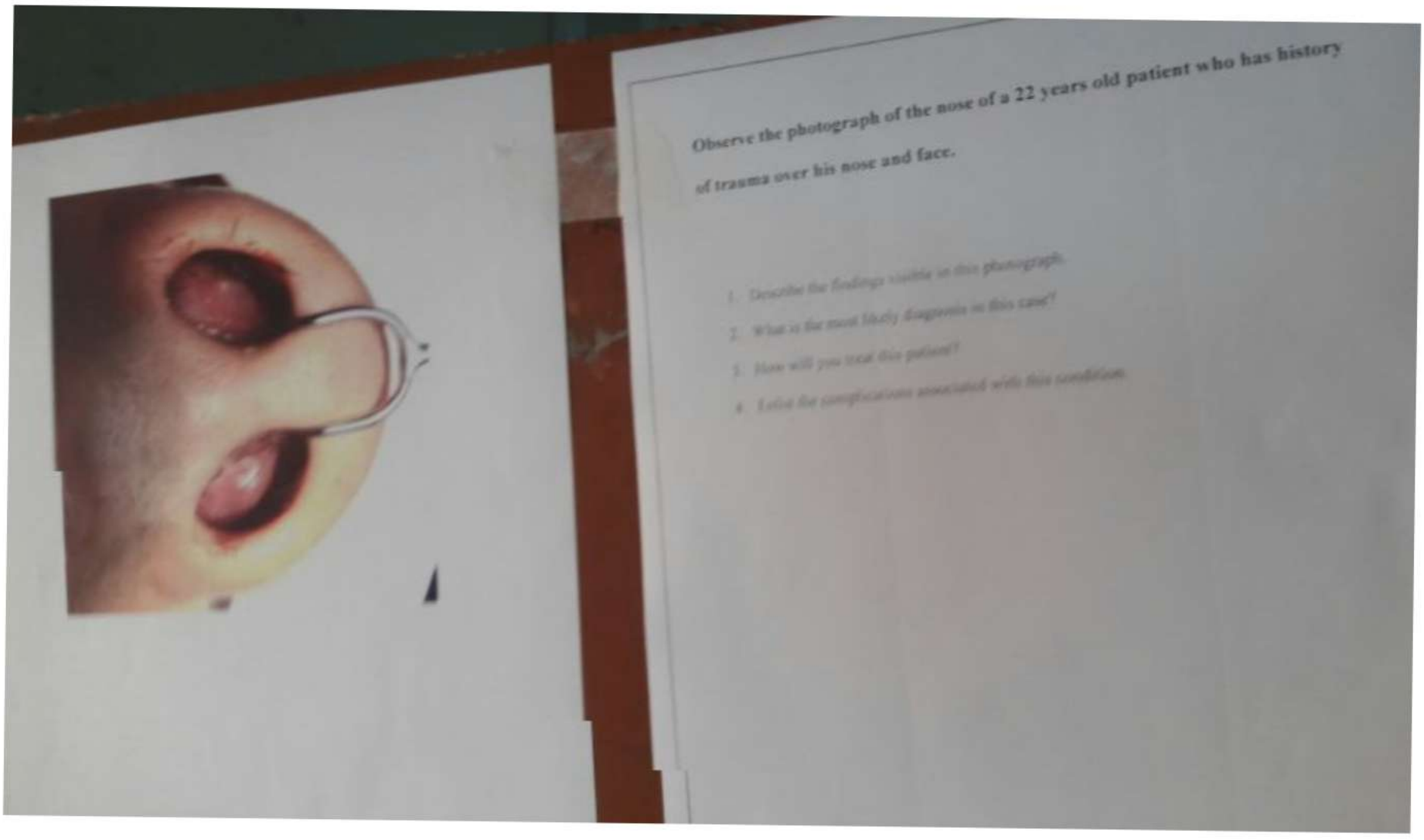
View Image

pajr.eg.net

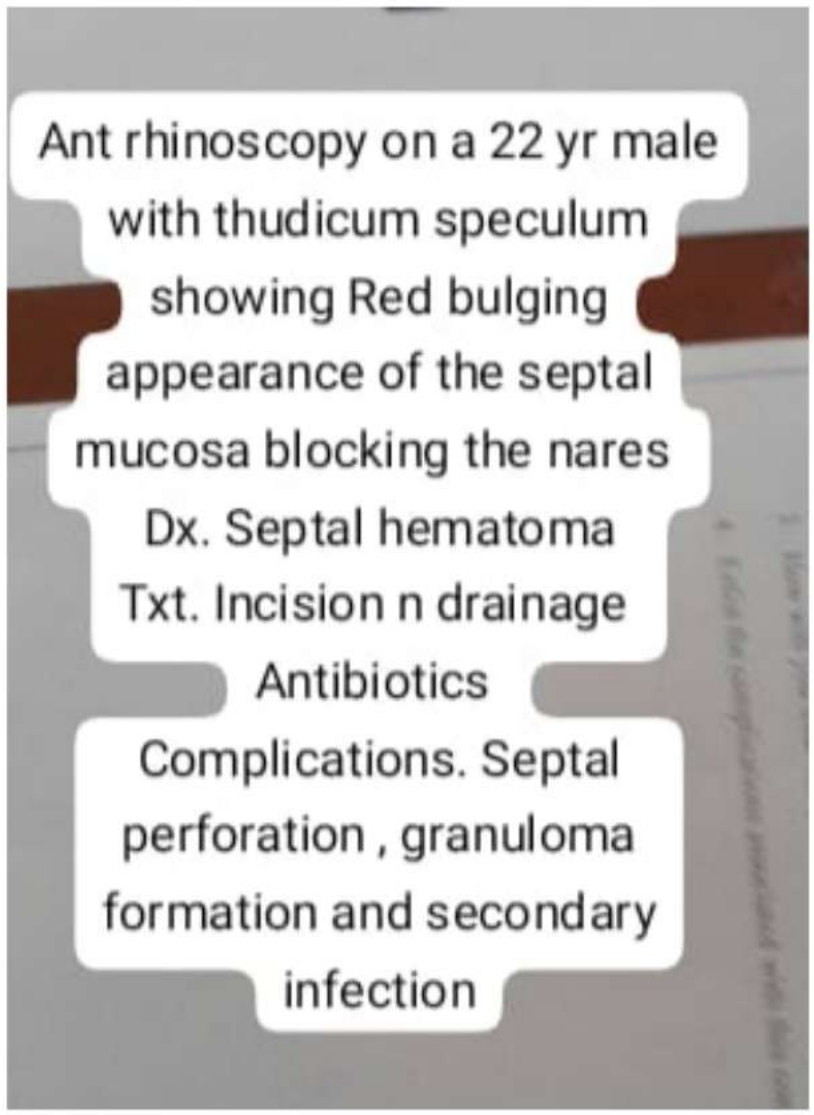
Nasal step of a left endoscopic e...

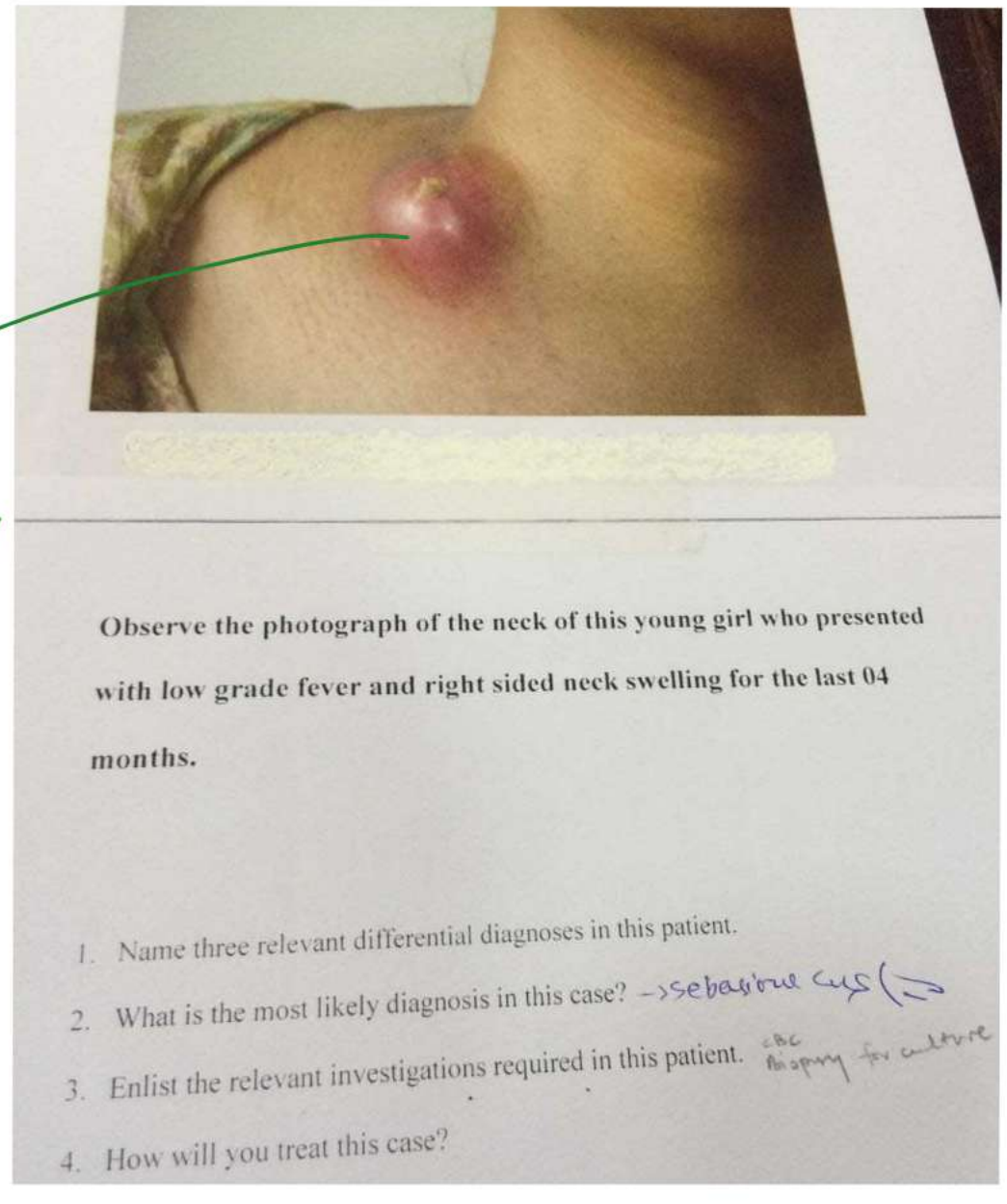
researchgate.net





1- Septal hematoma





Infective cyst or Abscess

1. Name three relevant differential diagnoses in this patient:

- **Sebaceous cyst with secondary infection**
- **Tuberculous lymphadenitis (Scrofula)**
- **Bacterial lymphadenitis (e.g., Staphylococcal or Streptococcal infection)**

2. What is the most likely diagnosis in this case?

- **Infected sebaceous cyst** (as noted in the handwriting on the paper).
- It is a benign cyst that develops from sebaceous glands and can become infected, leading to abscess formation.

3. Enlist the relevant investigations required in this patient:

- **Complete Blood Count (CBC)** – to assess infection (elevated WBC count).
- **Ultrasound of the neck** – to differentiate between a cyst, lymph node, or abscess.
- **Fine Needle Aspiration Cytology (FNAC) or biopsy** – to rule out tuberculosis or malignancy.
- **Bacterial culture & sensitivity** – to guide antibiotic therapy if pus is present.

4. How will you treat this case?

- **Incision and drainage (I&D)** – if the cyst is infected and forms an abscess.
- **Antibiotic therapy** – broad-spectrum antibiotics (e.g., Amoxicillin-Clavulanate or Clindamycin).
- **Surgical excision** – for recurrent sebaceous cysts after the infection resolves.
- **Antitubercular therapy (ATT)** – if tuberculosis is confirmed.

1. Describe the findings visible in the photograph

- The image shows **irregular, whitish lesions** on the vocal cords.
- There appears to be **nodular growths** affecting the vibratory function.
- Signs of **mucosal irregularity** and **possible hypertrophy** suggest chronic irritation or pathology.

2. What is the most likely diagnosis?

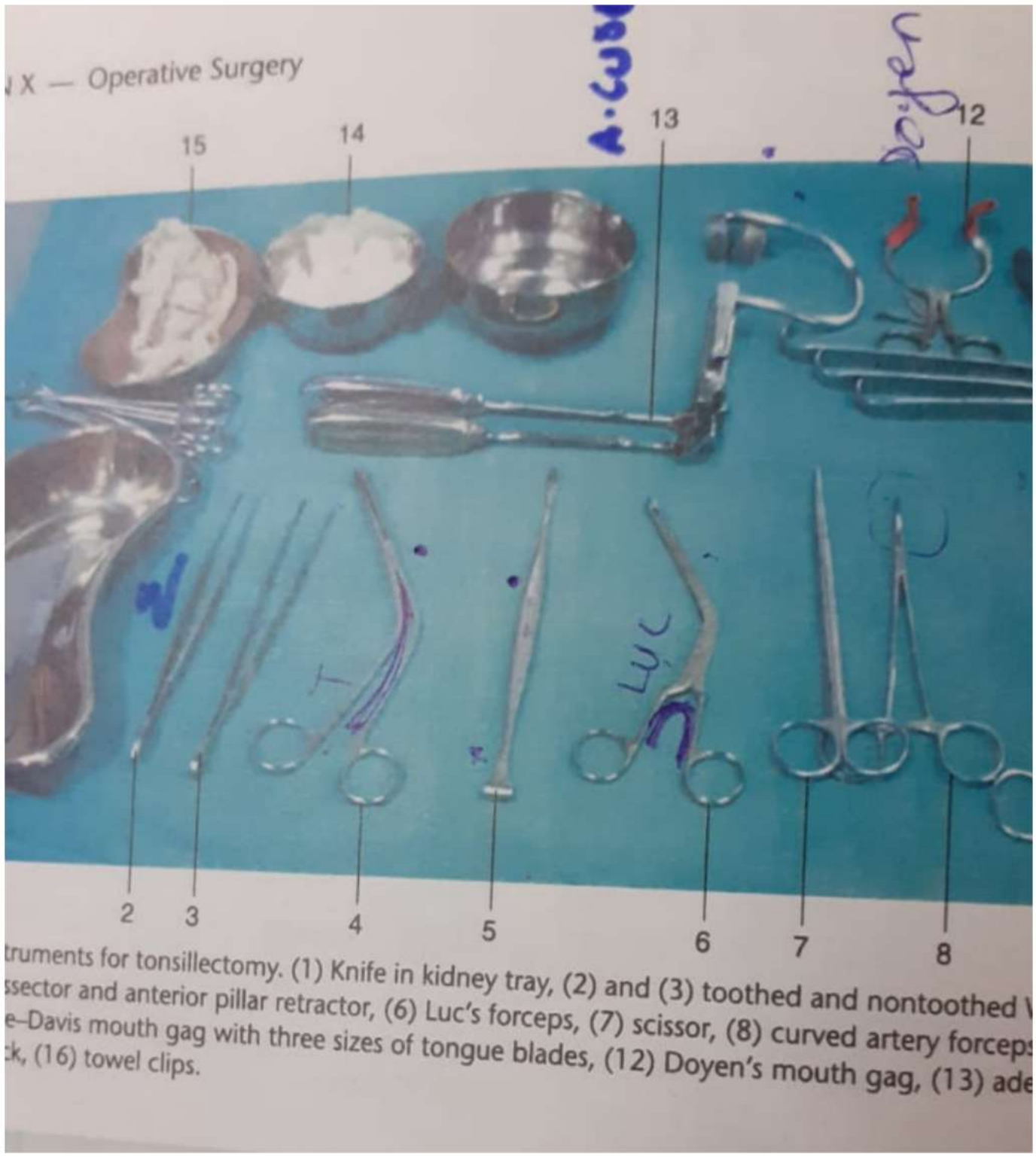
- The findings are highly suggestive of **Recurrent Respiratory Papillomatosis (RRP)**.
- RRP is caused by **Human Papillomavirus (HPV) types 6 and 11**.
- It is the most common benign neoplasm of the larynx in children and presents with **progressive hoarseness, stridor, and airway obstruction**.

3. What is the underlying disease mechanism?

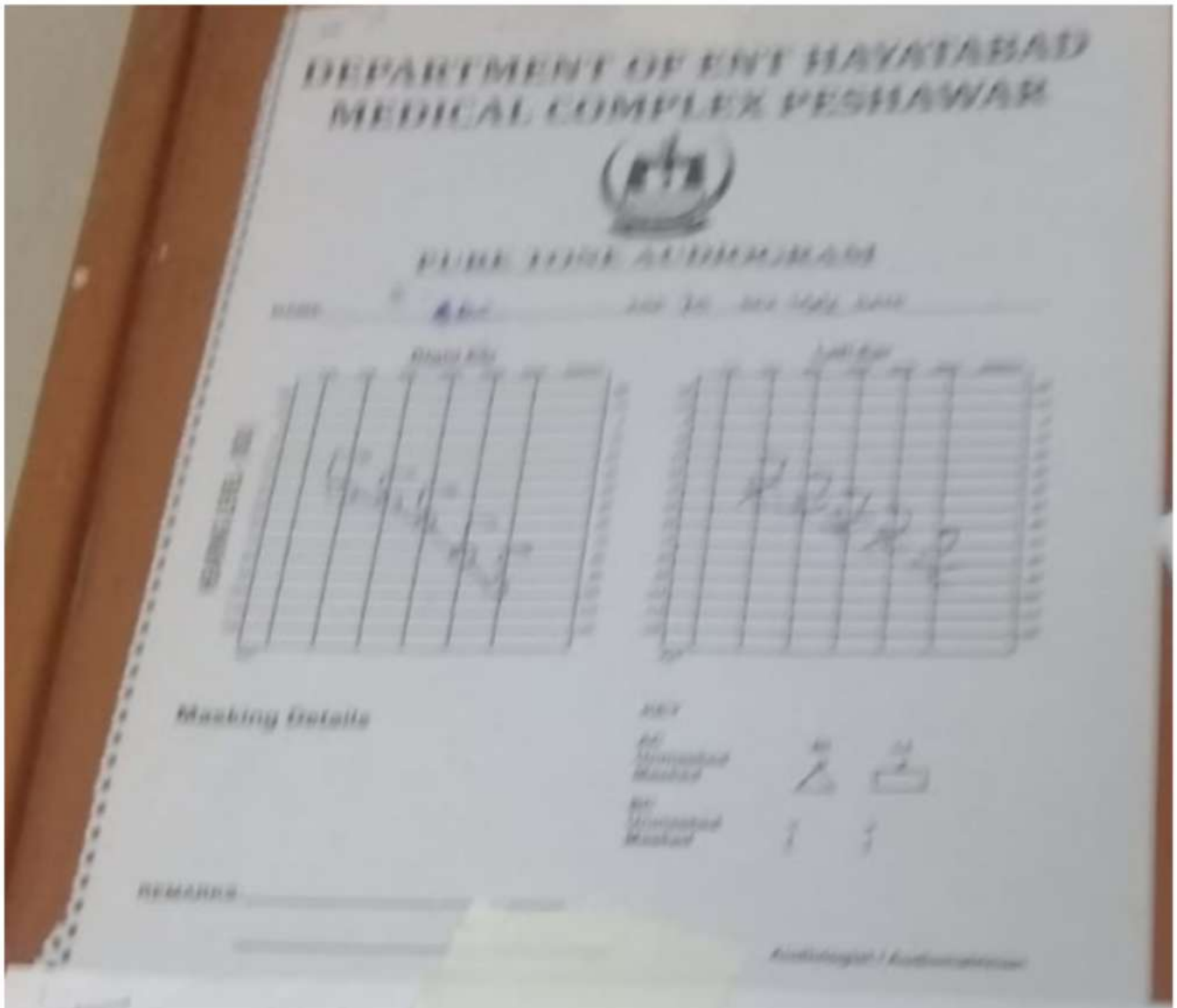
- The disease is caused by **HPV-induced proliferation** of squamous epithelial cells.
- It leads to **papilloma formation**, which can obstruct the airway and affect vocal cord function.
- Vertical transmission of HPV from mother to child during birth is a common cause in juveniles.

4. Name the treatment options for this condition

- **Surgical excision** using microlaryngeal surgery or laser ablation (CO_2 laser, microdebrider).
- **Adjuvant therapy** for recurrent cases:
  - **Cidofovir (antiviral injections)**
  - **Bevacizumab (anti-VEGF therapy)**
  - **Interferon-alpha** for immune modulation.
- **HPV vaccination** (Gardasil) is recommended to prevent further HPV-related lesions.



truments for tonsillectomy. (1) Knife in kidney tray, (2) and (3) toothed and nontoothed
ssector and anterior pillar retractor, (6) Luc's forceps, (7) scissor, (8) curved artery forceps
e–Davis mouth gag with three sizes of tongue blades, (12) Doyen's mouth gag, (13) ade
k, (16) towel clips.



1.Name thi

2.Which typ

3.What can

4.Enumerate

condition?

Name of this graph :-

Pure tone audiogram.

Type of Curve :-

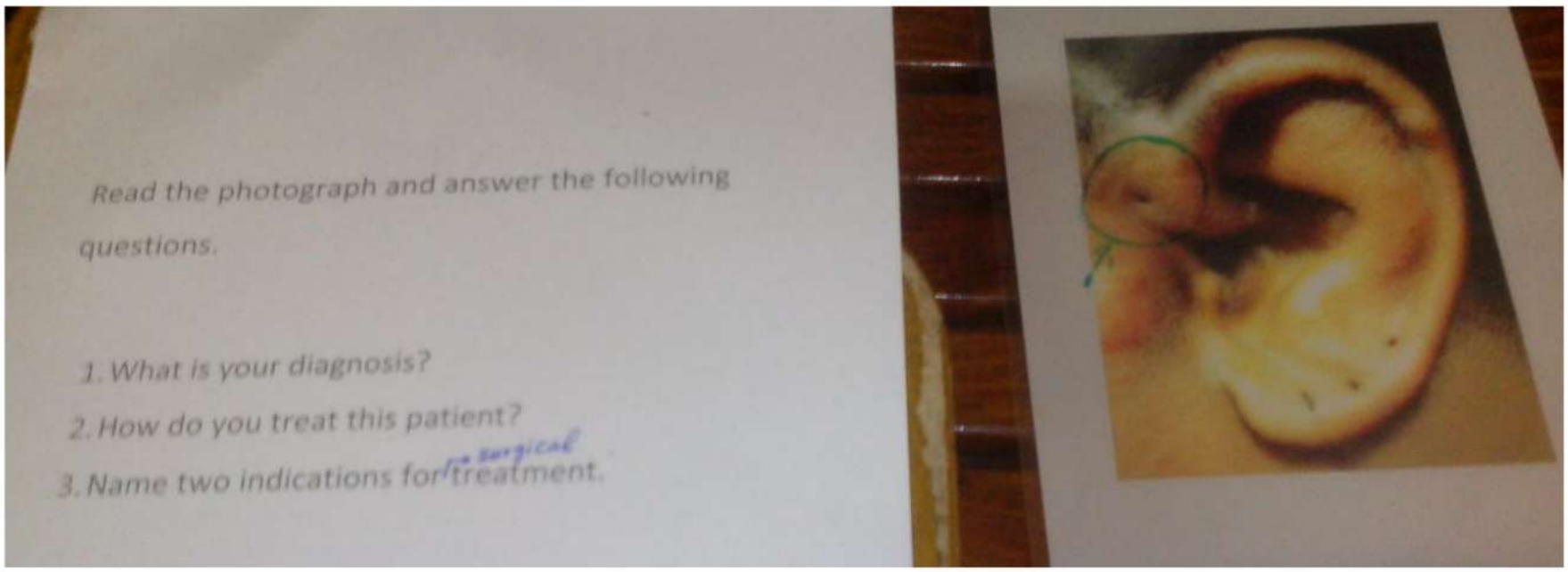
- Sensorineural Hearing loss more marked in higher frequencies ie sloping Curve.

Diagnosis :-

Presbycusis (Senile deafness)

Clinical Types :-

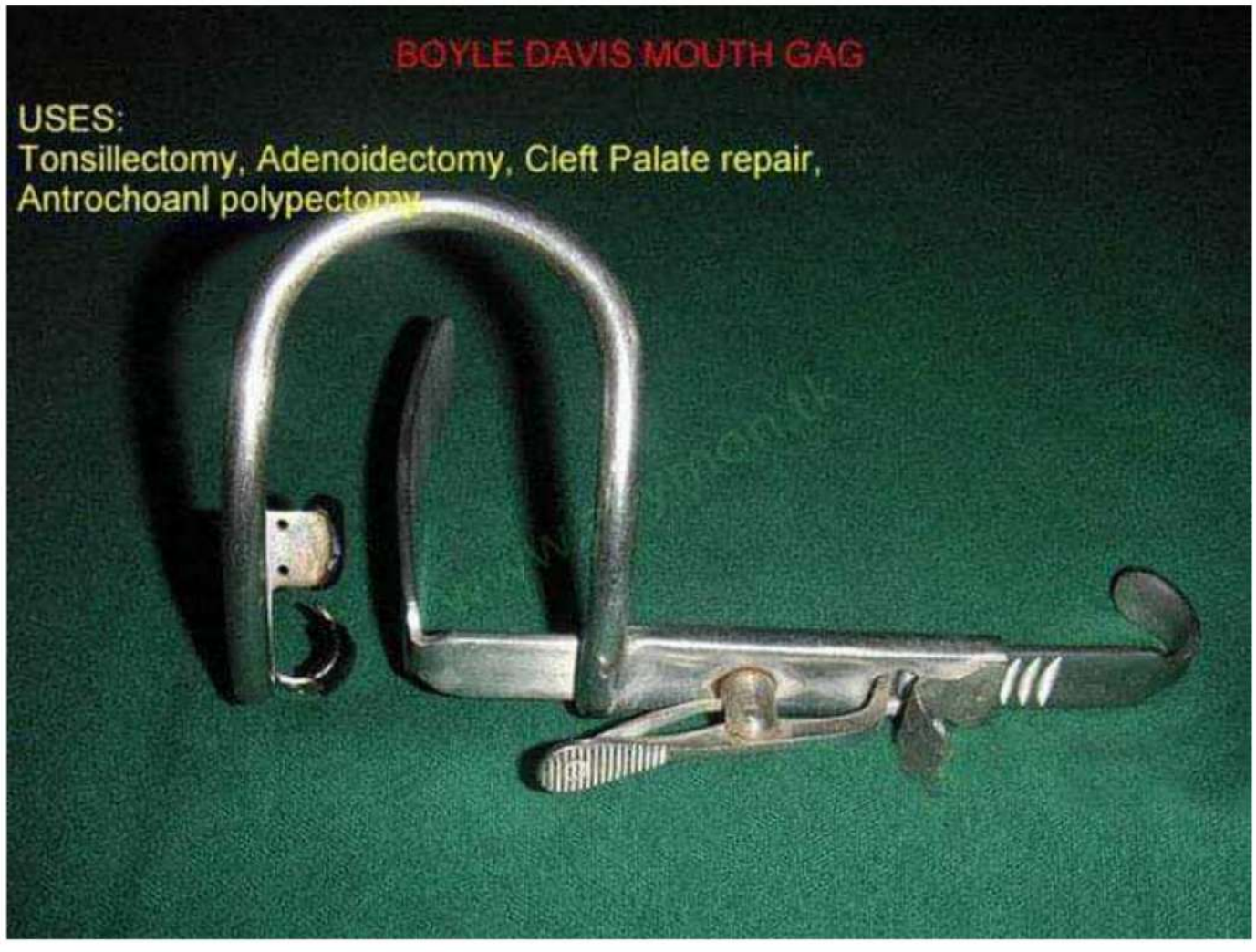
- Sensory
- Neural
- Metabolic
- Cochlear conductive
- Mixed
- Indeterminate



1- Pre Auricular Sinus

2- Complete Surgical excision of sinus with its whole tract

1. **Diagnosis:**
   - **Preauricular sinus infection or abscess.**
   - It could also be a **sebaceous cyst** or **branchial cleft anomaly** (though less likely).
2. **Treatment:**
   - **If infected:** Antibiotics and incision & drainage.
   - **Definitive treatment:** Surgical excision of the sinus tract to prevent recurrence.
3. **Indications for treatment:**
   - Recurrent infections or abscess formation.
   - Persistent drainage or cosmetic concerns.


BOYLE DAVIS MOUTH GAG
USES:
Tonsillectomy, Adenoidectomy, Cleft Palate repair,
Antrochoanl polypectomy

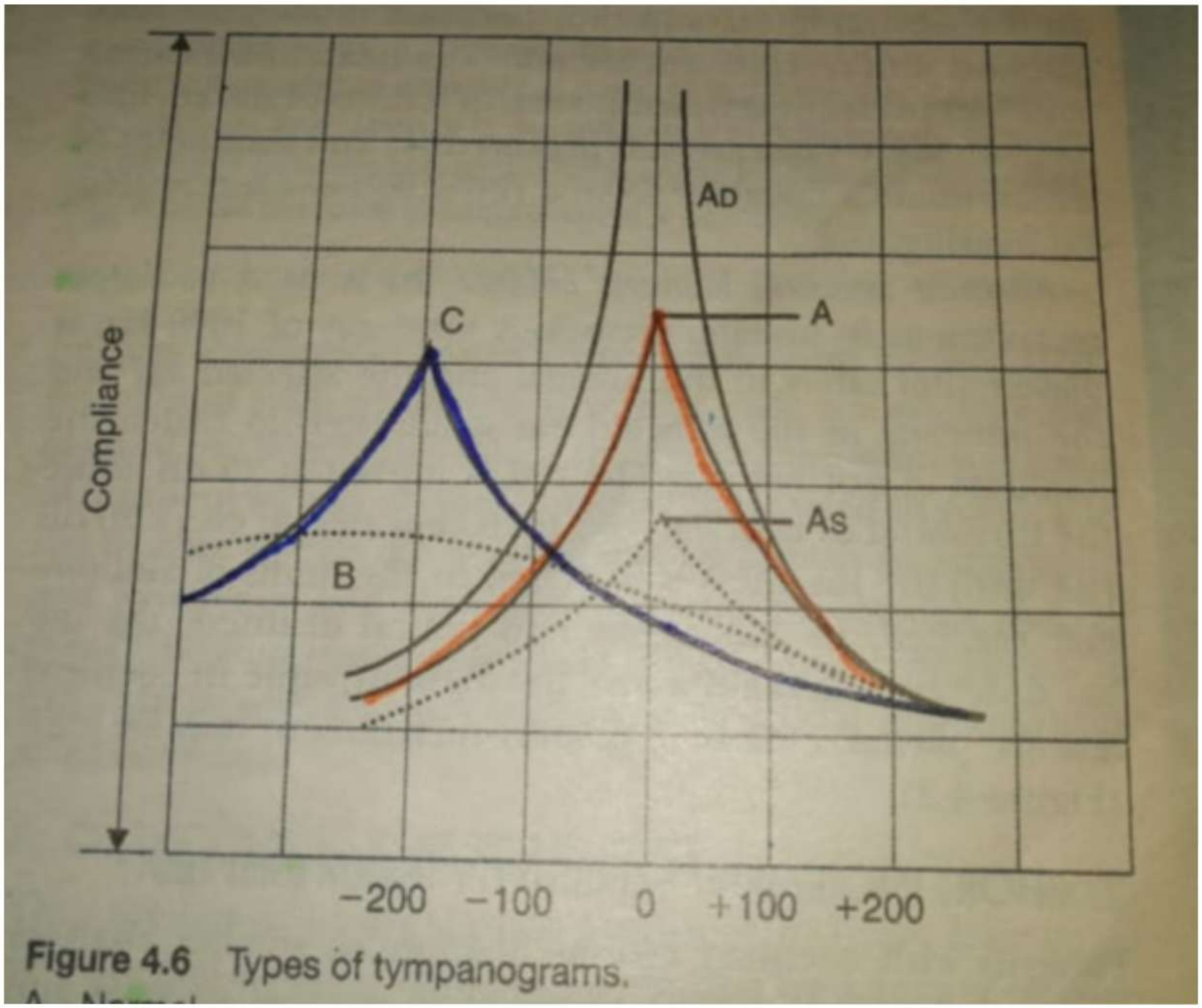


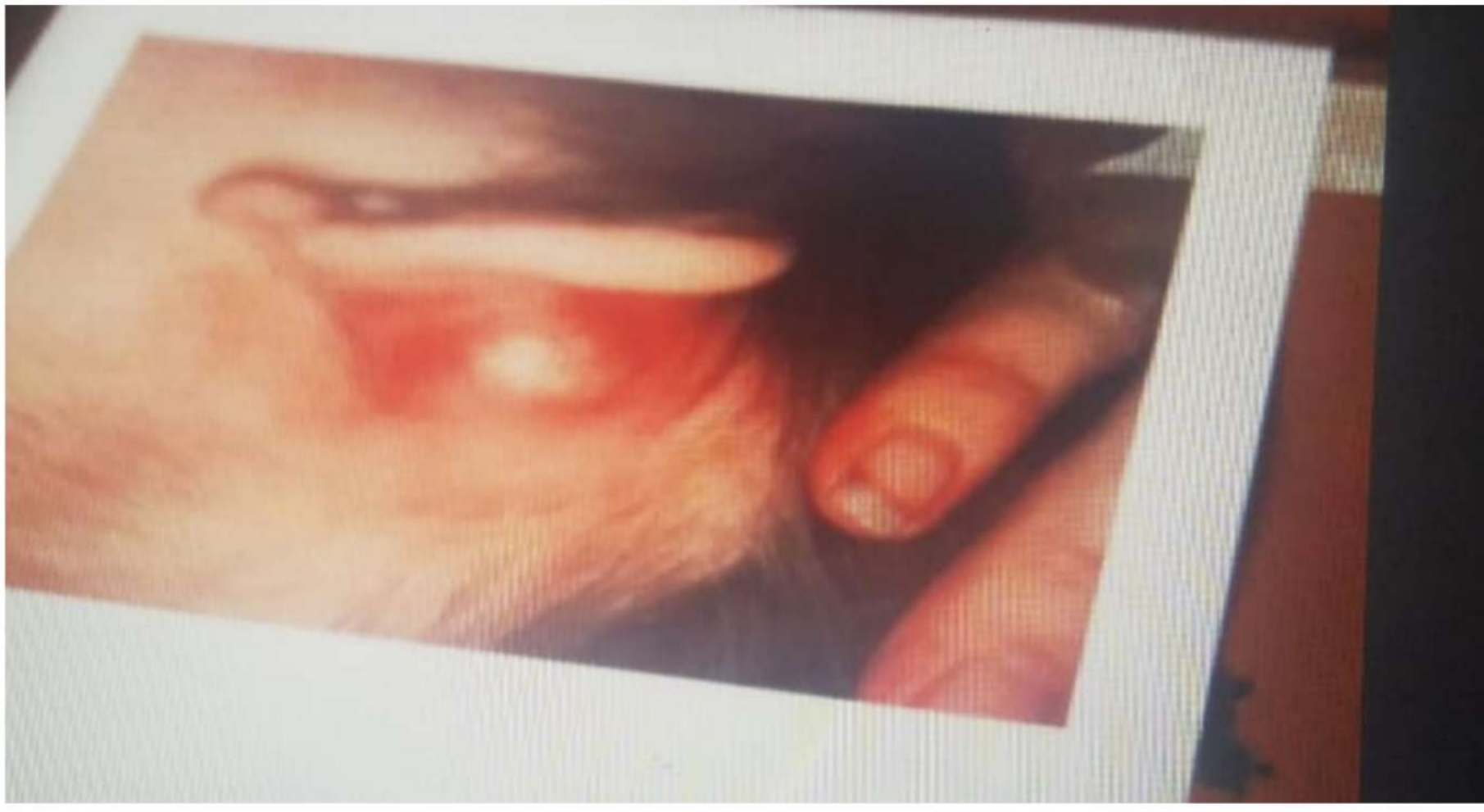
Figure 4.6 Types of tympanograms.

Observe the photograph of anterior rhinoscopy on a 30 years old patient, who has history of some nasal surgery six months back.

1. What is the diagnosis in this patient?
2. Enlist the causes of this condition.
3. How will you treat this patient?

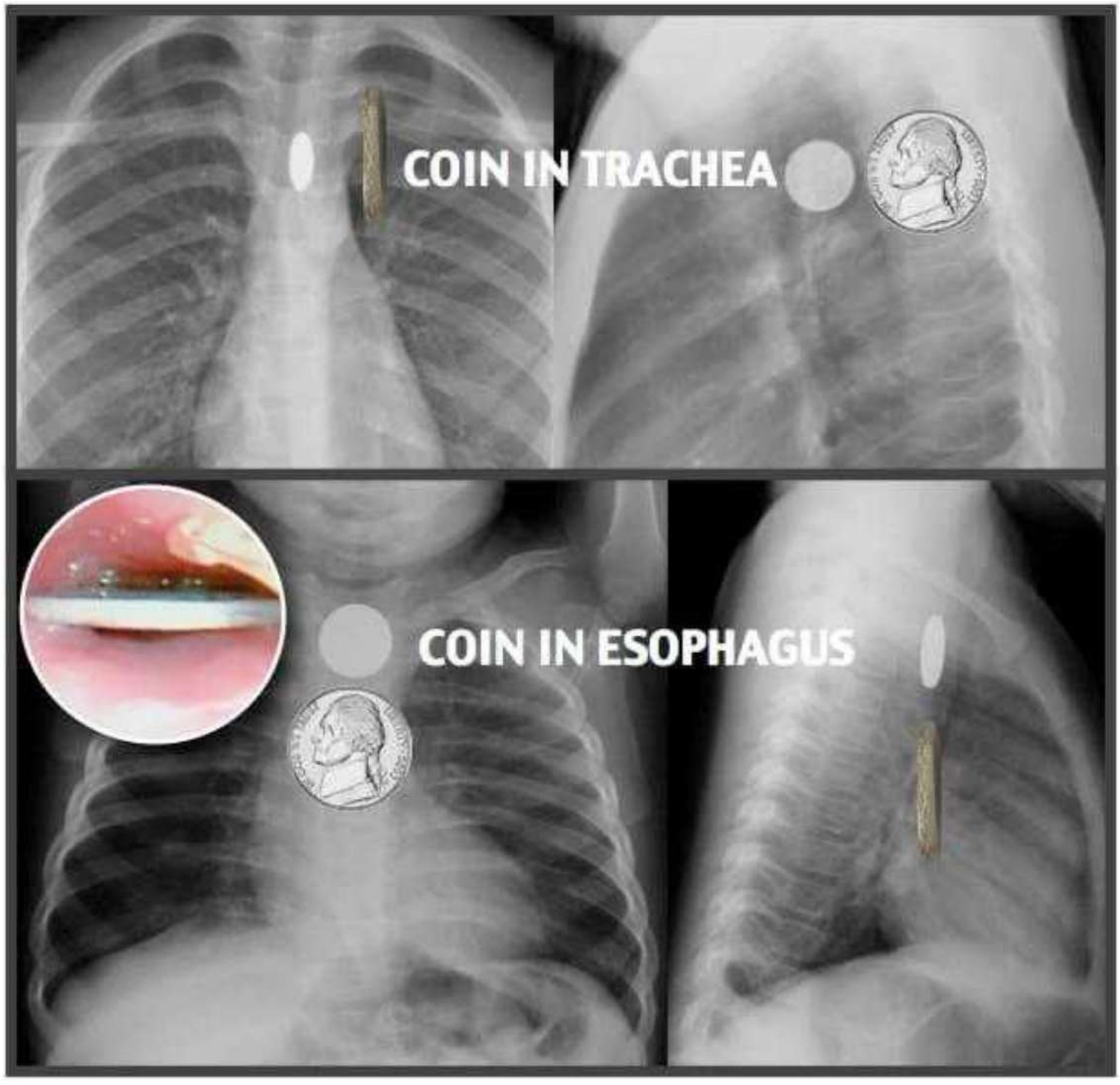
1- Septal perforation

2. Causes of this condition:
   - Septal surgery. ✓
   - Repeated bilateral cautery of the nasal septum. ✓
   - Tight anterior nasal packing. ✓
   - Penetrating injury of the nasal septum.
   - Snuff takers. ✓
   - Septal haematoma and abscess. ✓
   - Chronic granulomatous diseases of the nose. ✓
   - Foreign body or rhinolith. ✓
   - Idiopathic.
3. Treatment:
   - No treatment if there is no symptom.
   - Symptomatic treatment for crusting like 25% glucose in glycerin drops, normal saline spray and application of ointment.
   - Surgical closure of the perforation with mucosal flaps and obturators.



Mastoiditis

Perforated Tympanic Membrane


COIN IN TRACHEA
COIN IN ESOPHAGUS

Statement:

Please identify the instrument provided and answer the questions given below on the sheet provided.

Questions:

1. Please name the instrument provided?
2. In which operation is this instrument used?
3. What is the material of which this is made of?
4. What is the advantage of using this material?
5. What are two main types of these?

Q.1. Tracheostomy tube. 1

Q.2. In tracheostomy. 1

Q.3. Portex. 1

Q.4. It is non-irritant and can be tolerated for longer period. 1

Q.5. Cuffed and non-cuffed. 1

The Tubercle of Zuckerkandl **marks** the posterolateral aspect of the thyroid lobe and is most often found lateral to the **recurrent laryngeal nerve**. The tubercle can be found in 80% of thyroids and when found can lead directly to the **recurrent laryngeal nerve**, as 93% of the **nerves** are found medial to this tubercle. May 8, 2018

M www.medscape.com › answers › ho...

How is the recurrent laryngeal nerve identified in a thyroidectomy?


Shaft
Fenestration
Outer Cannula
Cuff
Pilot Balloon
Faceplate
Inner cannula
PracticalSLPinfo.com

Prolonged endotracheal intubation causes vocal cord demage plus hoarseness and airway compromise following extubation

What is pathological process involved in this instance

How this is avoided

How it is best treated

Pathological Process Involved:

Prolonged endotracheal intubation can lead to:

- **Pressure necrosis and ischemia** of the vocal cords due to prolonged contact with the endotracheal tube.
- **Laryngeal edema** and inflammation causing airway narrowing.
- **Vocal cord paralysis** due to recurrent laryngeal nerve injury.
- **Granuloma formation** and **fibrosis** leading to stenosis.
- **Posterior glottic stenosis** or **subglottic stenosis** due to scarring.

Prevention Strategies:

- Use **properly sized** endotracheal tubes to reduce pressure on the vocal cords.
- Limit **intubation duration**, consider tracheostomy if prolonged ventilation is needed.
- Regularly check **cuff pressure** (maintain at **20-30 cm H2O**) to prevent excessive pressure on the mucosa.
- Use **minimally traumatic intubation techniques**, with video laryngoscopy if needed.
- **Steroid administration** (e.g., dexamethasone) in high-risk patients to reduce edema.

Best Treatment Approach:

- **Mild cases:** Supportive therapy with **voice rest, humidified oxygen, and corticosteroids** to reduce inflammation.
- **Moderate cases:** Speech therapy, inhaled corticosteroids, and close monitoring.
- **Severe cases (granuloma, stenosis, paralysis):**
  - **Microlaryngeal surgery** to remove granulation tissue or correct stenosis.
  - **Laser excision** for stenosis or granulomas.
  - **Vocal cord medialization procedures** for paralysis.
  - **Tracheostomy** in cases of severe airway compromise.

36

Picture of thyroidectomy with recurrent laryngeal nerve exposed

What are the surgical land mark of right laryngeal nerve

Treatment ? if there is paralysis of right laryngeal nerve

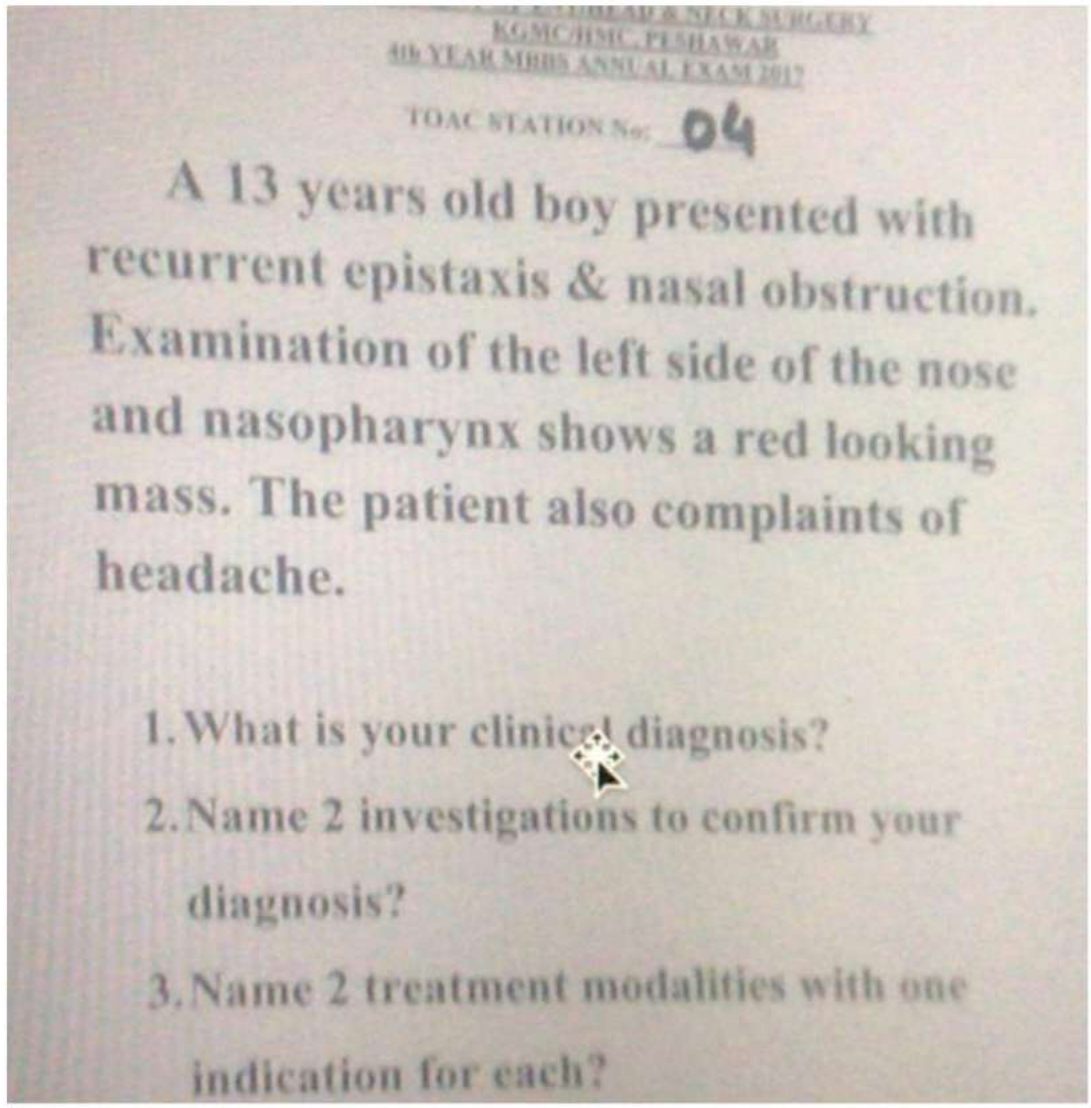
DEPARTMENT OF ENT/HEAD & NECK SURGERY
KGMC/HMC, PESHAWAR
PRE-PROF EXAM AUG-2019

TOAC STATION No: 14

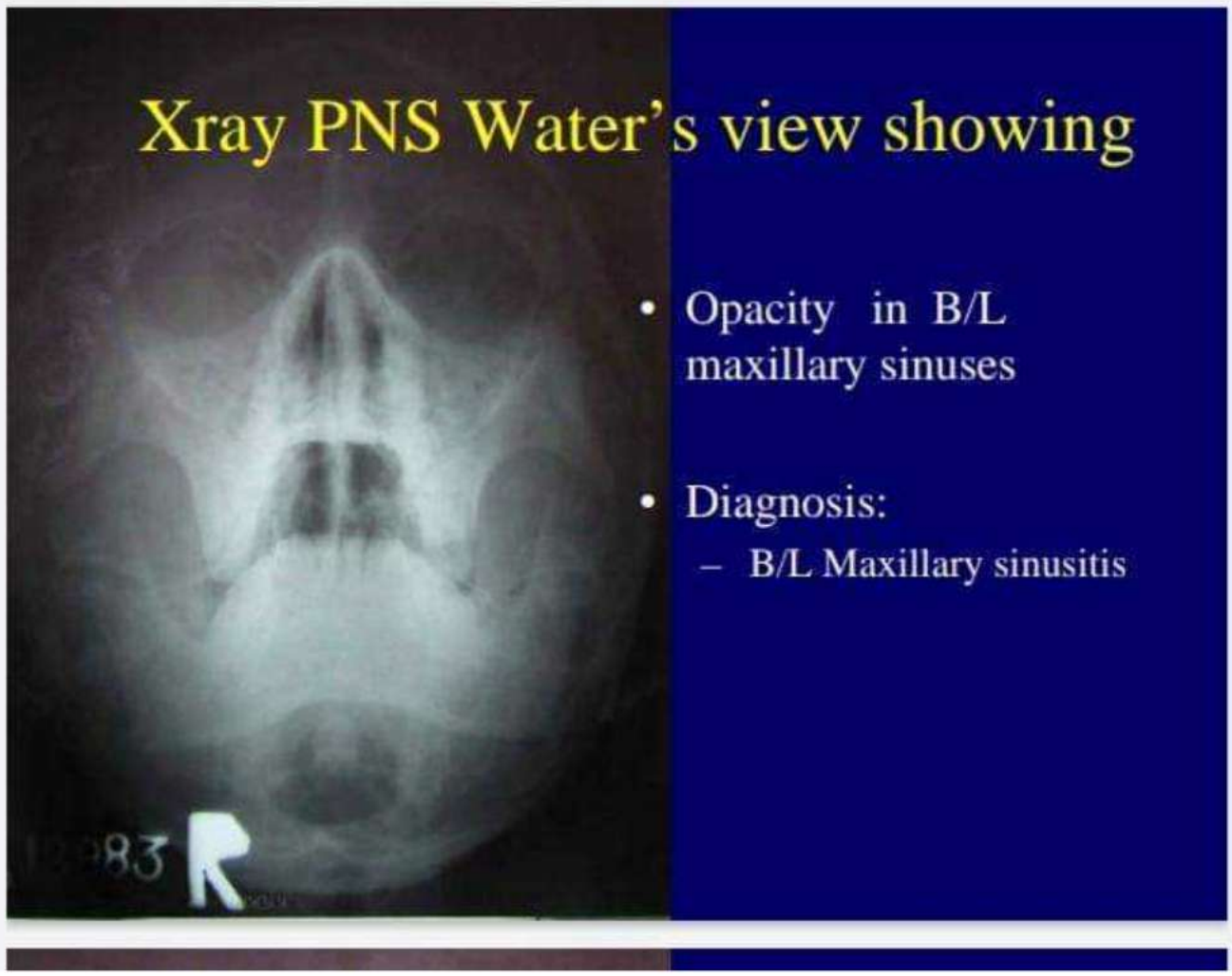
A 5 years old boy was brought by his parents with the complaint of decrease hearing both ears for the last one year with mild earache. There is no history of ear discharge. On examination both ear drums are retracted with conductive hearing loss.

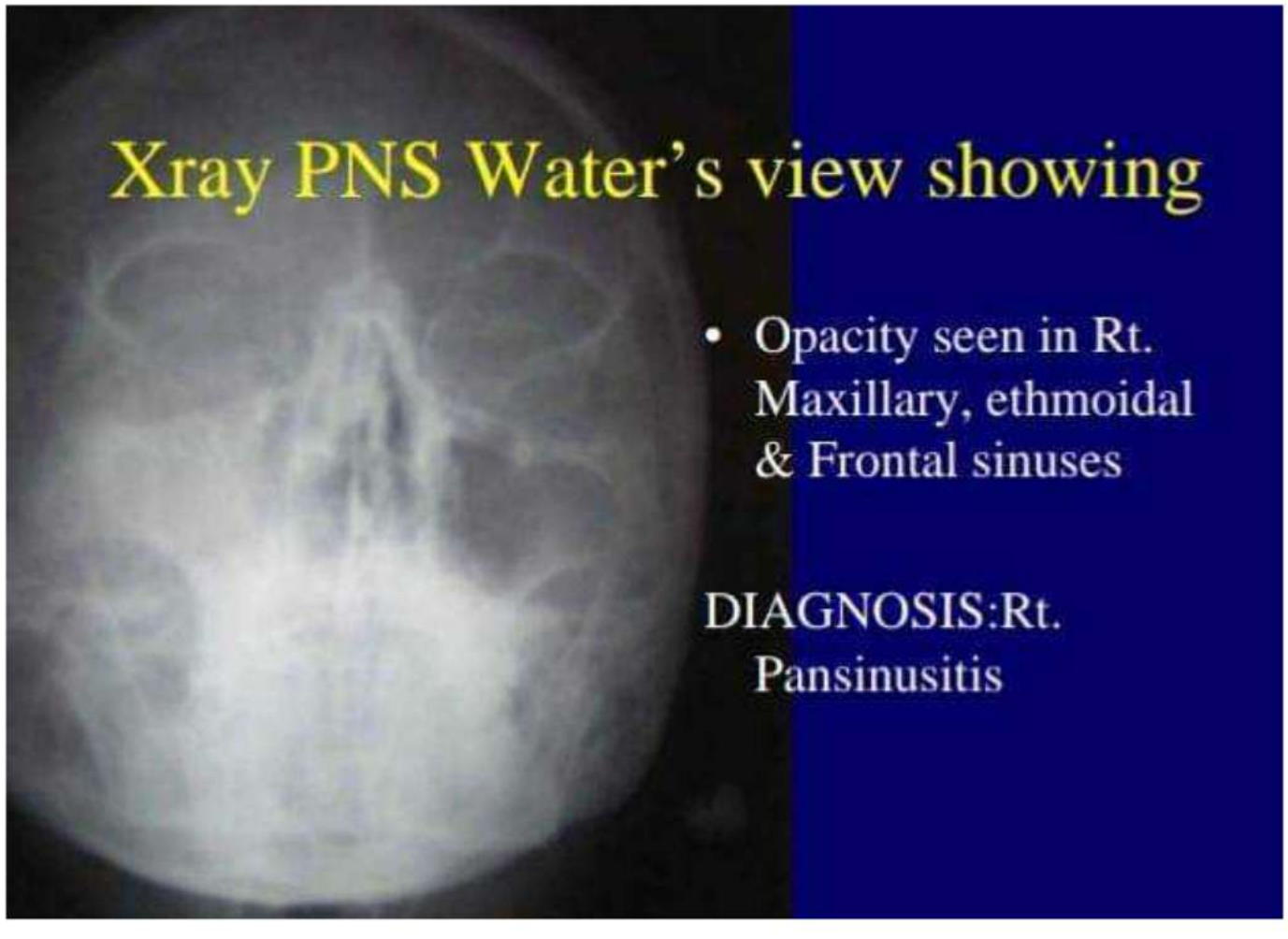
1. What is your diagnosis?
2. Name three aetiological factors leading to this condition?
3. Name at least 2 surgical treatment options for this condition?

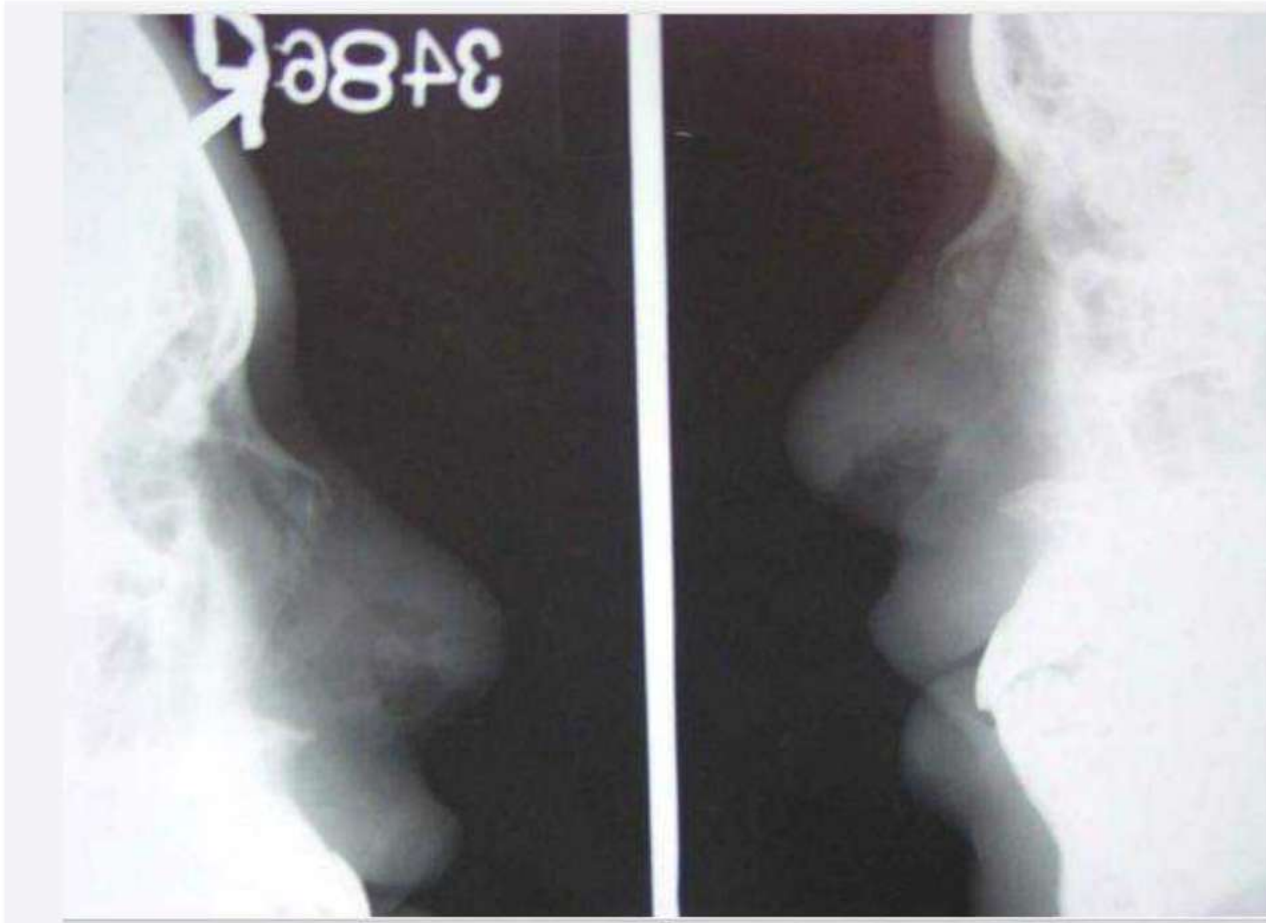
A -



1. **Clinical Diagnosis:**
   - The most likely diagnosis is **Juvenile Nasopharyngeal Angiofibroma (JNA)**.
   - It is a **benign but locally aggressive vascular tumor** that occurs **exclusively in adolescent males** and commonly presents with **recurrent epistaxis, nasal obstruction, and a reddish nasopharyngeal mass**.
2. **Investigations to Confirm Diagnosis:**
   - **Contrast-Enhanced CT Scan (CECT) of the Nasopharynx and Skull Base** – Identifies the tumor extent and involvement of surrounding structures.
   - **Magnetic Resonance Imaging (MRI) with Angiography** – Helps assess vascular supply and differentiate from other nasopharyngeal masses.
   - **Digital Subtraction Angiography (DSA)** – For preoperative embolization planning (optional).
   - **Biopsy is contraindicated** due to the high vascularity of the tumor, which may cause severe bleeding.
3. **Treatment Modalities and Indications:**
   - **Surgical Excision (Definitive Treatment)**
     - Indicated for **most cases** where the tumor is localized and resectable.


Xray PNS Water's view showing
• Opacity in B/L maxillary sinuses
• Diagnosis:
– B/L Maxillary sinusitis


Xray PNS Water's view showing
• Opacity seen in Rt. Maxillary, ethmoidal & Frontal sinuses
DIAGNOSIS:Rt. Pansinusitis



Fracture Nasal bones

- If displacement +
- No edema- reduced immediately
- If edema +
  - Symptomatic treatment till edema subsides for 5-7 days
  - Fracture reduced after edema has subsided
  - May be combined with septorhinoplasty at a later date

X ray neck AP view

- Round radio opaque object (? Coin)
- In Esophagus
  - Because the esophagus is an AP compressed tubular structure
  - A coin would occupy this position
  - Can be confirmed by lateral view

X ray neck Lateral view

A 25 years old male patient is complaining of sore throat and bilateral earache of 3 days duration. He then developed high grade fever of 102 degree F, severe left earache and inability to open mouth. On examination there is trismus, left tonsil is red and swollen and the uvula is pushed to right side. Both tympanic membranes are normal and mobile.

A- Quinsy (Peritonsillar Abscess)
B- Clinical examination
CBC
Throat Swab Culture
Neck Ultrasound

a. What is your diagnosis?
b. What investigations will you suggest?
c. What are differential diagnoses?
d. How do you treat this patient?

3. **Differential Diagnoses:**
   - **Severe Acute Tonsillitis** – Usually bilateral, without uvular deviation.
   - **Parapharyngeal Abscess** – More systemic involvement, bulging in the lateral pharyngeal wall.
   - **Epiglottitis** – More stridor and respiratory distress rather than trismus.
   - **Diphtheria** – Presence of a grayish pseudomembrane.
4. **Treatment:**
   - **Medical Management:**
     - **IV antibiotics** (e.g., amoxicillin-clavulanate or clindamycin).
     - **Analgesics and antipyretics** (e.g., ibuprofen, paracetamol).
     - **IV fluids and supportive care** if dehydration is present.
   - **Surgical Management (Definitive Treatment):**
     - **Needle aspiration** of the abscess.
     - **Incision and drainage (I&D)** if needle aspiration is unsuccessful.
     - **Tonsillectomy (Quinsy tonsillectomy)** in recurrent cases.

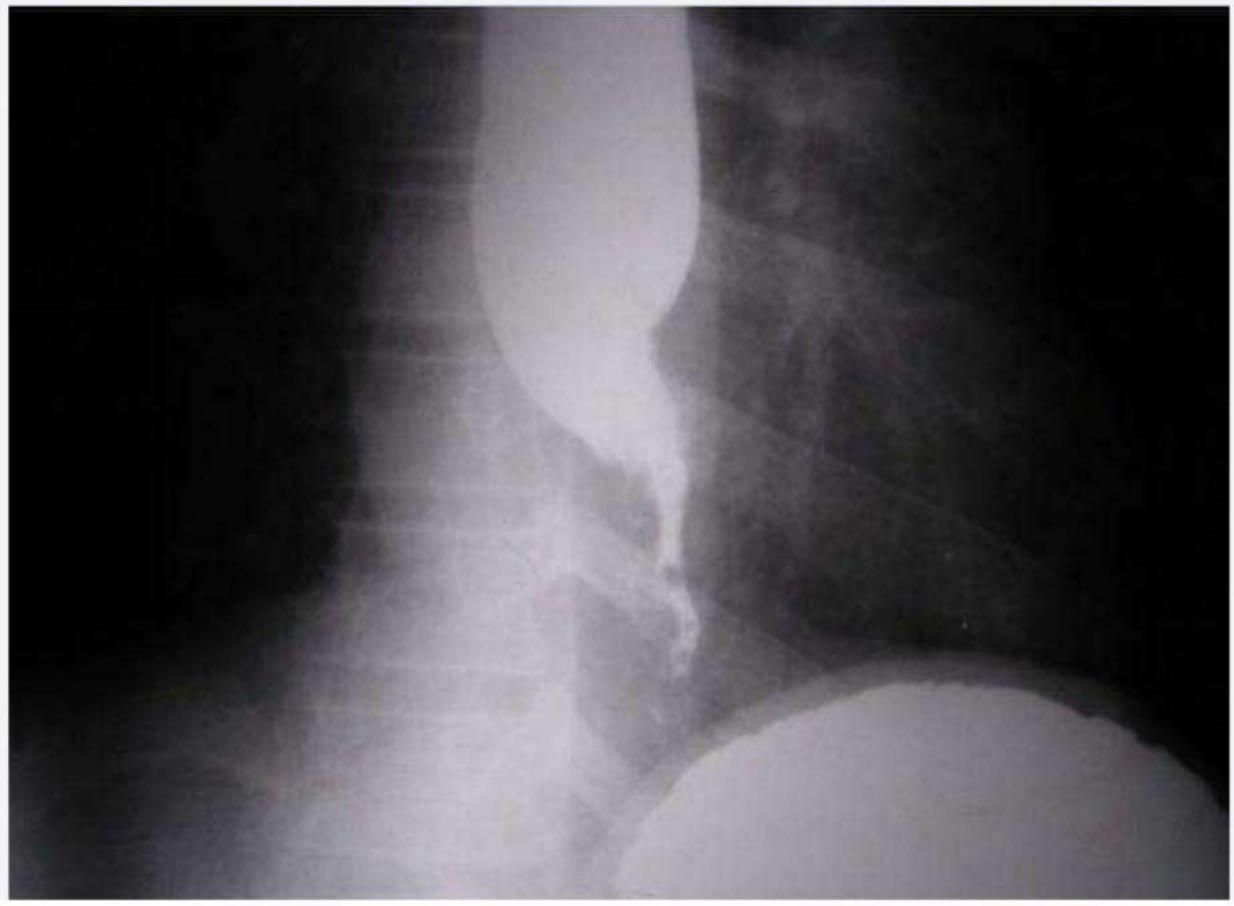
BARIUM SWALLOW

- Achalasia Cardia
  - Regular dilatation of esophagus
  - Air fluid level
  - Abrupt stricture formation
  - "Rat tail appearance / Bird beak appearance"
- Malignancies

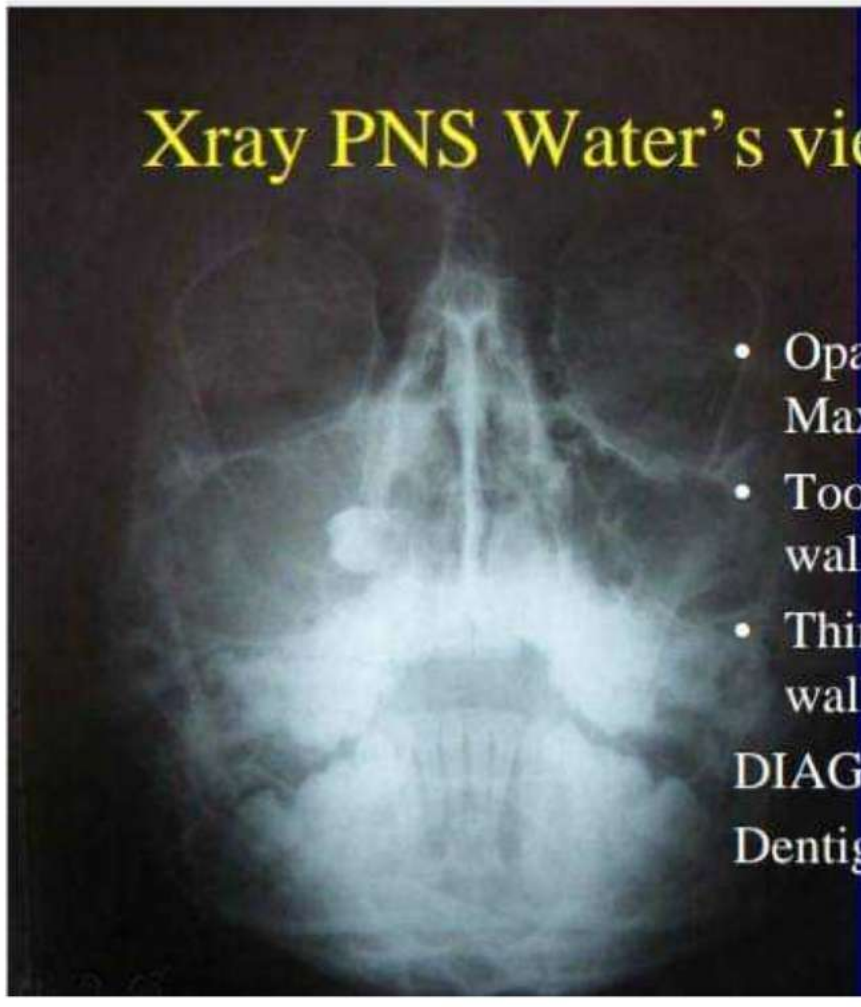
  "Shouldering effect" – due to everted margins of malignant ulcer

  Proximal dilatation

  " Apple core appearance" -



Xray PNS Water's view showing



- Opacity seen in Rt. Maxillary sinus
- Tooth on the medial wall
- Thinned out Sinus walls

DIAGNOSIS:

Dentigerous cyst

A 25 years old male patient came to ENT OPD with inability to close his right eye and deviation of angle of mouth to the left side, especially on smiling, of 3 days duration. He gave history of bilateral foul smelling ear discharge and decreased hearing for the last 5 years.

(LMN type)

A- Facial Nerve palsy as a complication of CSOM with effusion

B- Right ear

a. What complication has occurred in this patient?
b. Which ear is affected by the complication?
c. What investigations would you suggest?
d. How would you treat this patient

3. **Investigations:**
   - **High-Resolution CT (HRCT) Temporal Bone** – To assess bony erosion and cholesteatoma extent.
   - **MRI Brain with Contrast** – To rule out intracranial complications.
   - **Pure Tone Audiometry (PTA)** – To assess the degree of hearing loss.
   - **Facial Nerve Electromyography (EMG)** – To assess the severity of nerve involvement.
   - **Ear swab culture & sensitivity** – To guide antibiotic therapy.
4. **Treatment:**
   - **Medical Management:**
     - Broad-spectrum **intravenous antibiotics** (e.g., ceftriaxone + metronidazole).
     - **Topical ear drops** (quinolone-based).
     - **Corticosteroids** to reduce nerve inflammation.
     - **Facial physiotherapy** to prevent muscle contractures.
   - **Surgical Management (Definitive Treatment):**
     - **Modified Radical Mastoidectomy (MRM)** – To remove the cholesteatoma and infected tissue.

A 3 years old child was brought to ENT ward in emergency because of sudden attacks of breathing difficulty and cyanosis for the last few hours while playing with other children in the street. On examination the child was apyrexic, air entry was diminished on the right side of the chest and wheeze could also be heard on the same side.

A- Foreign body Aspiration

B -

2. **Differential Diagnoses:**
   - Asthma exacerbation
   - Pneumonia
   - Pneumothorax
   - Bronchiolitis
   - Tracheomalacia

a. What is your diagnosis?
b. What are differential diagnoses?
c. What investigations will you suggest?

3. **Investigations:**
   - **Imaging:**
     - **Chest X-ray (PA & lateral view)** – May show air trapping, atelectasis, or a radiopaque foreign body.
     - **Inspiratory and expiratory films** – To detect air trapping (if the object is non-radiopaque).
     - **Fluoroscopy** – Can help detect dynamic airway obstruction.
   - **Bronchoscopy (Rigid or Flexible):**
     - *Diagnostic and Therapeutic* – Confirms presence and location of the foreign body and allows for removal.
   - **Pulse Oximetry/ABG:**
     - To assess oxygenation and ventilation status if severe respiratory distress is present.

A young boy of 7 years presents to ENT OPD complaining of marked earache on Right Side with high grade fever following upper respiratory tract infection. On examination the right tympanic membrane is intact, congested and red looking.

A- Acute Otitis media

B- Streptococcus pneumonia
Hemophilus influenza
Moraxella catarrhalis

a. What is the most probable diagnosis?
b. What are the commonest organisms involved?
c. How will you treat this child?

3. **Treatment Plan:**
   - **Pain and Fever Management:**
     - Paracetamol or Ibuprofen
   - **Antibiotic Therapy (if indicated):**
     - First-line: **Amoxicillin** (High dose)
     - If allergic to penicillin: **Cefdinir, Cefuroxime, or Azithromycin**
   - **Supportive Care:**
     - Adequate hydration
     - Nasal decongestants (if needed)
   - **Follow-up:**
     - Re-evaluate in 48–72 hours if symptoms persist or worsen
   - **Complication Management:**
     - If the child develops persistent infection or complications (e.g., mastoiditis), referral to an ENT specialist for further management may be needed.

A 60 years old male known smoker came to ENT OPD with hoarseness for the last one year. IDL showed left immobile vocal cord with a mass on it. Neck examination is clear.

a. What is the most likely diagnosis?
b. Name the best radiological investigation.
c. How will you confirm your diagnosis?
d. What are the treatment options?

A- Laryngeal Carcinoma (Glottic Cancer)

B- CECT of neck and chest

C - Direct Laryngoscopy with biopsy

D

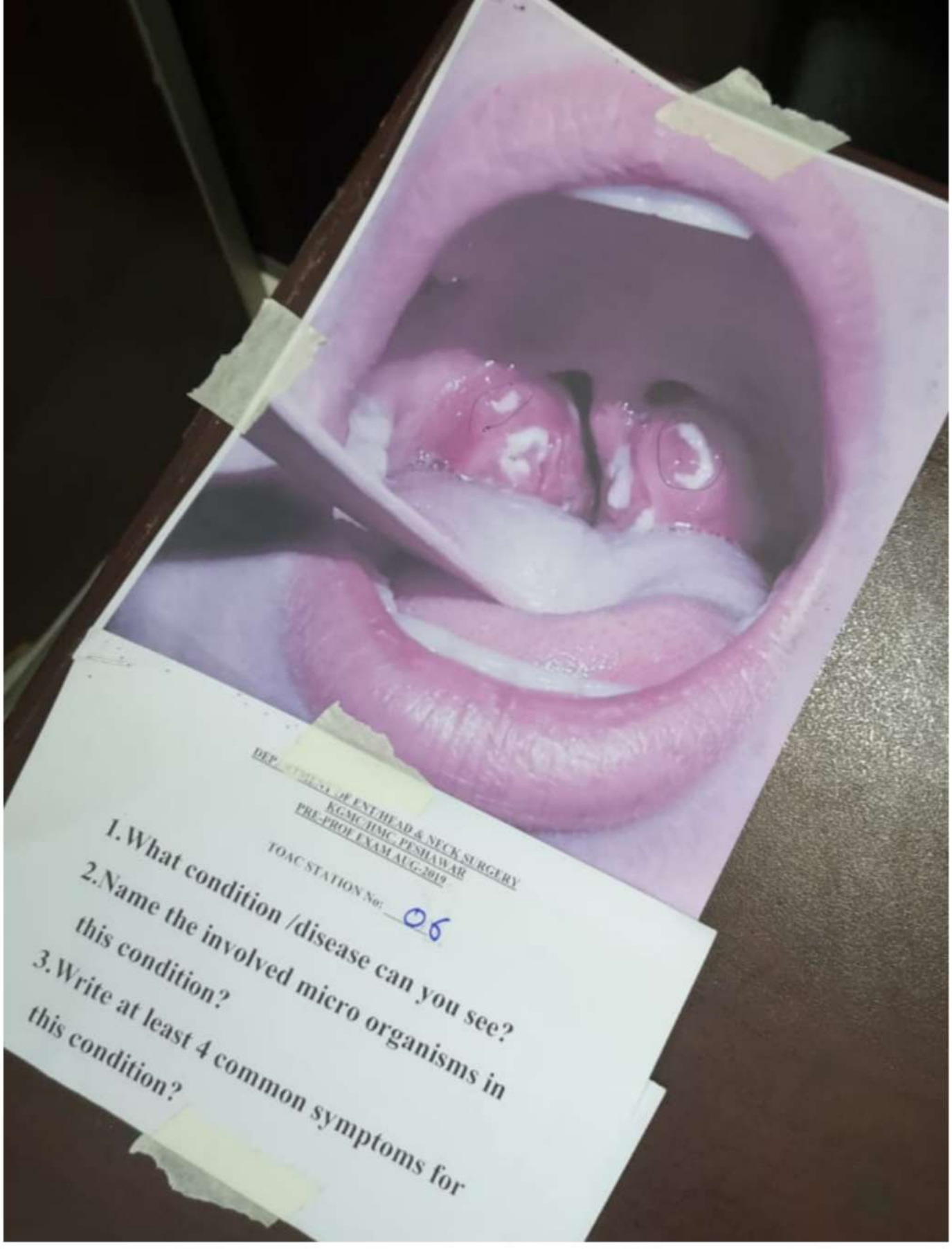
4. **Treatment Options:**
   - **Early-stage (T1, T2):**
     - Laser excision or radiotherapy
   - **Advanced-stage (T3, T4):**
     - Total or partial laryngectomy with neck dissection
     - Chemoradiotherapy for unresectable cases or to preserve the voice
   - **Palliative care:**
     - In cases of metastatic or inoperable disease, supportive therapy and palliative radiotherapy

A 13 year old boy presented to ENT OPD with history of progressive nasal obstruction on left side nose and recurrent profuse nose bleed for last six months. On examination he is pale looking and there is a fleshy mass in nose and nasopharynx and left conductive deafness while rest of ENT examination is unremarkable.

(A) Juvenile Nasopharyngeal Angiofibroma
(B) CT or MRI of Nasopharynx
(C) No, biopsy is contraindicated

a. What is the most probable diagnosis?
b. Write one important investigation which can help in the diagnosis.
c. Is biopsy is one of the investigations in this case?
d. How will you treat this patient?

3. **Is Biopsy Recommended?**
   - **No, biopsy is contraindicated.**
   - Due to the high vascularity of JNA, a biopsy can cause life-threatening hemorrhage.
4. **Treatment Approach:**
   - **Preoperative Embolization:** Reduces blood supply to minimize intraoperative bleeding.
   - **Surgical Excision:** The mainstay of treatment, performed through open or endoscopic approaches depending on tumor extent.
   - **Radiotherapy:** Reserved for unresectable or recurrent cases.



1- Acute Tonsillitis

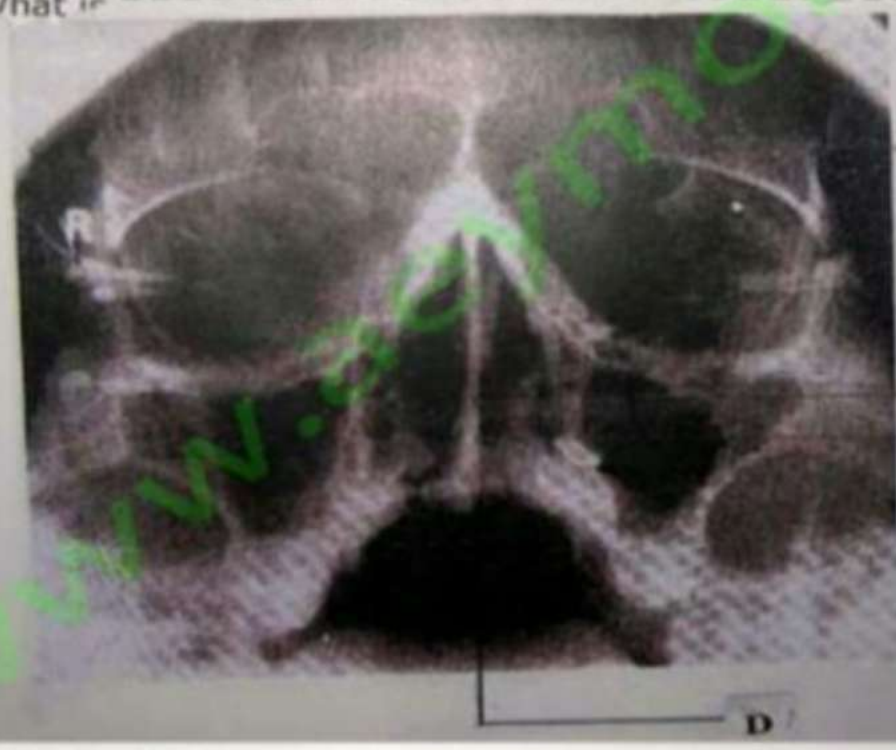
2- Gruyp A Streptococcus
Staph aureus
Hemophilus

3- Sore throat, Fever, Dysphagia
enlarged tonsils, Bad breath
(Halitosis)

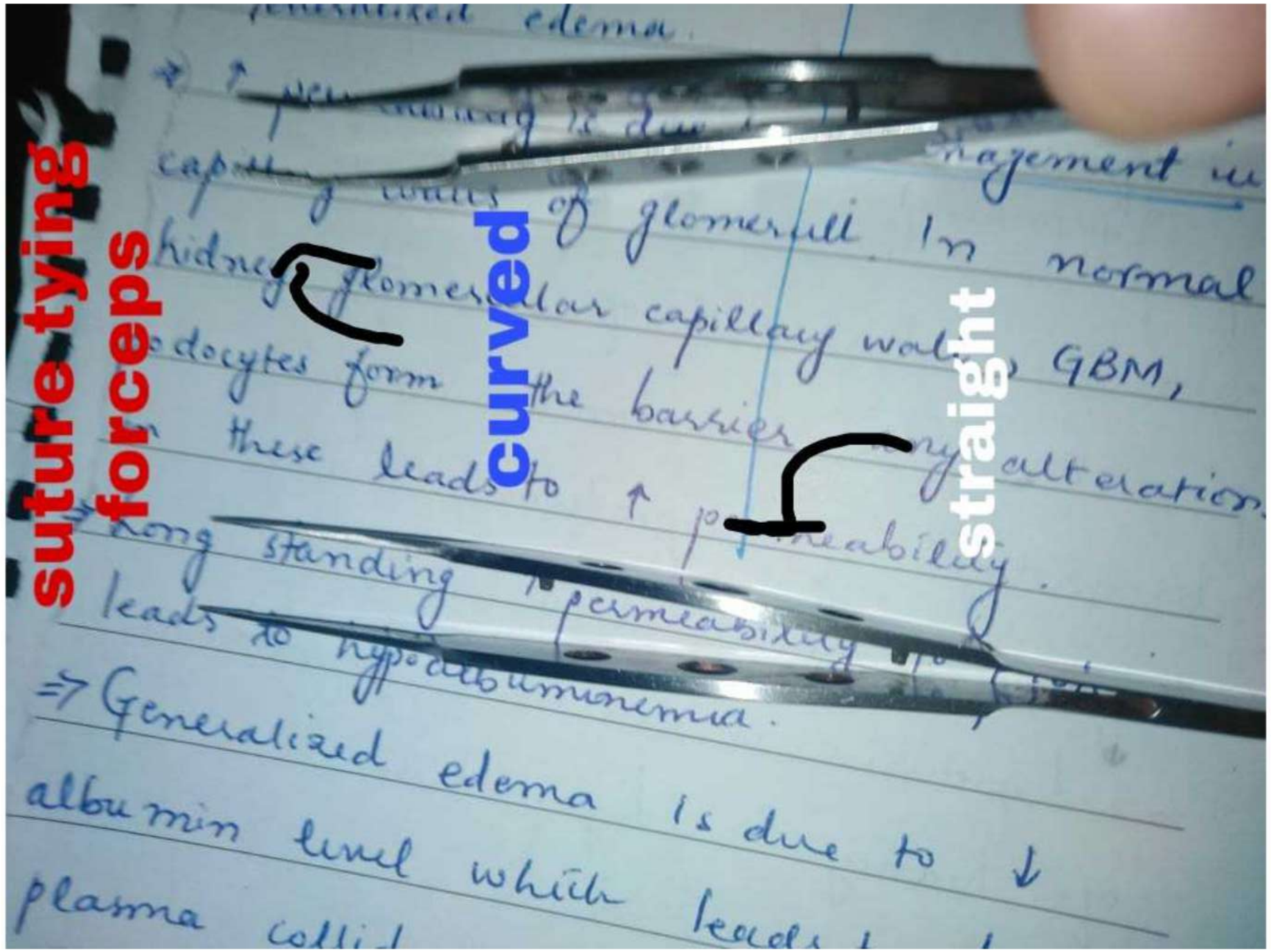
Carefully examine the given X-ray and answer the questions:

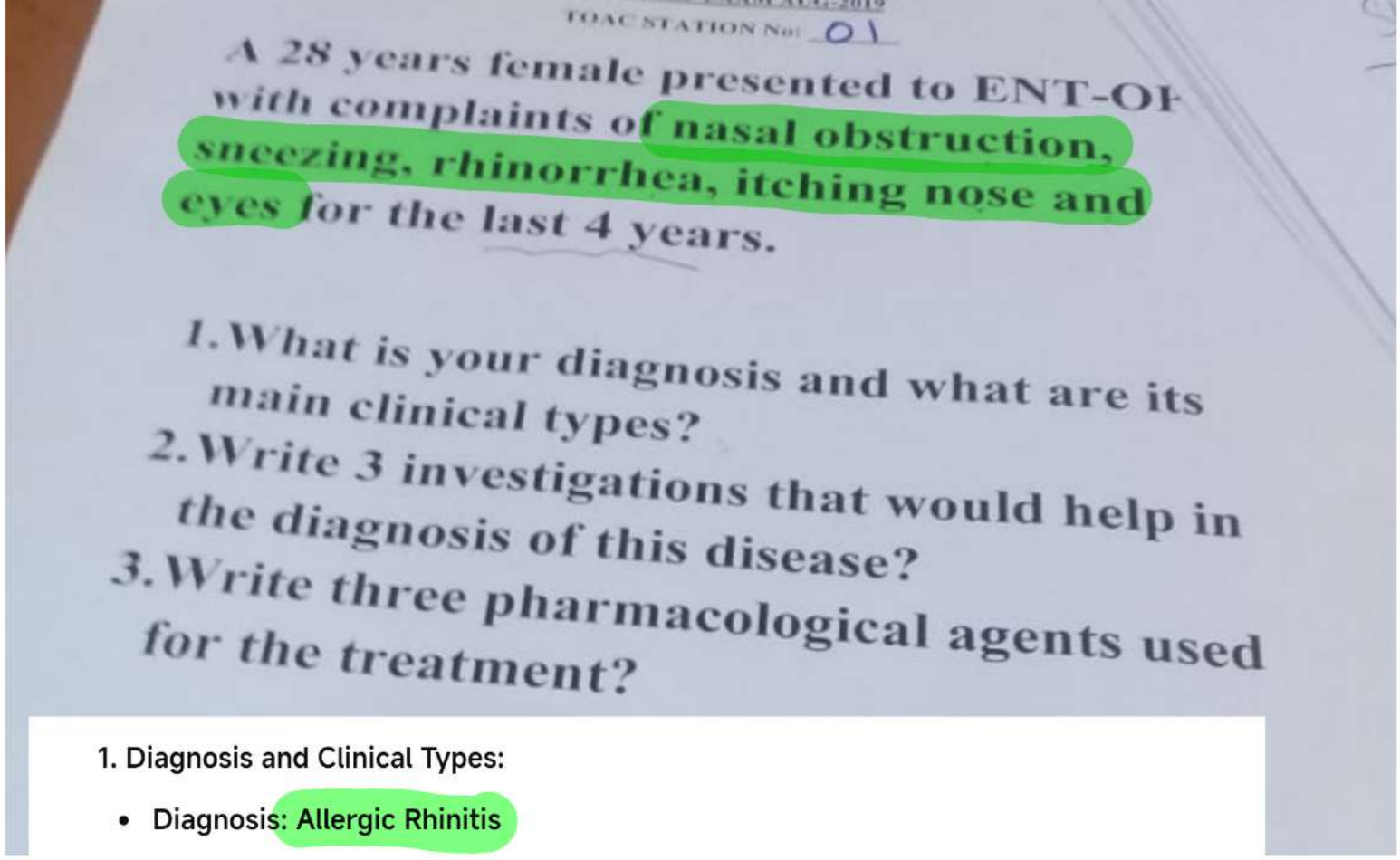
1. What is this X-ray?	01
2. What is the view of this X-ray?	01
3. What is A?	0.5
4. What is B?	0.5
5. What is C?	0.5
6. What is D?	0.5

What is



1. X-Ray PNS 45°	01
2. Water's view/ occipitomental view of the sinuses.	01
3. Septum	0.5
4. Maxillary sinus.	0.5
5. Frontal sinus.	0.5
6. Sphenoid sinus.	0.5


suture tying
forceps
curved
straight



1. Diagnosis and Clinical Types:

- **Diagnosis: Allergic Rhinitis**
- **Clinical Types:**
  1. **Seasonal Allergic Rhinitis (Hay Fever)** – Symptoms triggered by seasonal allergens (e.g., pollen).
  2. **Perennial Allergic Rhinitis** – Symptoms persist throughout the year due to allergens like dust mites, pet dander, and mold.
  3. **Occupational Allergic Rhinitis** – Triggered by workplace allergens (e.g., chemicals, dust, animal dander).

---

2. Three Investigations for Diagnosis:

1. **Skin Prick Test (SPT)** – Identifies specific allergens causing the reaction.
2. **Serum IgE Levels & Specific Allergen Testing (RAST – Radioallergosorbent Test)** – Measures immune response to allergens.
3. **Nasal Endoscopy** – Helps rule out nasal polyps, deviated septum, or other structural issues.

3. Three Pharmacological Agents for Treatment:

1. **Antihistamines** – E.g., Loratadine, Cetirizine, Fexofenadine (reduce sneezing, itching, and rhinorrhea).
2. **Intranasal Corticosteroids** – E.g., Fluticasone, Budesonide, Mometasone (reduce nasal inflammation).
3. **Decongestants** – E.g., Oxymetazoline (short-term use to relieve nasal congestion).

Other supportive treatments include allergen avoidance, saline nasal irrigation, and immunotherapy in severe cases.

The late **treatment** methods **of** RLN **injury** include thyroplasty, injection into and near vocal cords and arytenoid adduction, in order to move the vocal cords inward and to improve the voice; and laser arytenoidectomy, cordectomy, vocal cord abduction and fixation in order to expand glottis and improve the dyspnea. Jan 15, 2014

www.ncbi.nlm.nih.gov › articles › P...

Prevention and treatment of recurrent laryngeal nerve injury in ...

DEPARTMENT OF ENT/HEAD & NECK SURGERY
KGMC/HMC, PESHAWAR
PRE-PROF EXAM AUG-2019

TOAC STATION No: 14

A 5 years old boy was brought by his parents with the complaint of decrease hearing both ears for the last one year with mild earache. There is no history of ear discharge. On examination both ear drums are retracted with conductive hearing loss.

1. What is your diagnosis?
2. Name three aetiological factors leading to this condition?
3. Name at least 2 surgical treatment options for this condition?

1. Diagnosis:

- **Otitis Media with Effusion (OME)** (also called **serous otitis media** or **glue ear**).
- The presence of **bilateral conductive hearing loss, retracted tympanic membranes, and a history of mild earache without discharge** strongly suggests OME.

---

2. Three Etiological Factors:

1. **Eustachian Tube Dysfunction** (due to adenoid hypertrophy, allergies, or infections).
2. **Recurrent Upper Respiratory Tract Infections (URTI)** (causing persistent fluid buildup in the middle ear).
3. **Allergic Rhinitis** (leading to chronic inflammation and blockage of the Eustachian tube).

---

3. At Least Two Surgical Treatment Options:

1. **Myringotomy with Grommet (Ventilation Tube) Insertion** – Helps drain fluid and equalize pressure.
2. **Adenoidectomy** – Recommended if adenoid hypertrophy is causing persistent Eustachian tube dysfunction.

DEPARTMENT OF ENT HEAD & NECK SURGERY
KGMC/HMC, PESHAWAR
PRE-PROF EXAM AUG-2019

TOAC STATION No: 12

A laryngoscopic picture is shown?

1. **What is your diagnosis?**
2. **Name causative factors?**
3. **What will be symptoms of this patient?**
4. **Name treatment modalities?**

Sofia Shah 93

Station # 12

① Vocal Nodule

② . Misuse of voice. like in Singers, Teachers, Qari Sahab
. Trauma
. GERD

③ . Hoarseness of voice

④ → Delaration
→ Speech Therapy
→ Voice Rest
→ Removal of Nodule by cold Instruments or Laser Therapy.

superior rectus holding forceps

plain forceps

(aka toothed forceps)

② Hypoalbuminemia with

③ Generalized

⇒ ↑ permeability

capillary walls of glomeruli In normal

kidney glomerular capillary wall, GBM,

podocytes form the barrier. any alterations

in these leads to ↑ permeability.

⇒ Long standing ↑ permeability to proteins

leads to hypoalbuminemia.

⇒ Generalized edema is due to ↓

albumin level which leads to ↓

plasma colloidal osmotic pressure.

A 3 year old boy was brought by his mother with history of left side nasal obstruction, nasal bleed off & on and foul smelling discharge left side nose for last 2 months. On anterior rhinoscopy only mucopus was visible. There was no history of snoring. Rest of ENT examination was normal.

a. Most Likely Diagnosis:

- **Unilateral Foreign Body in the Nose**
- The presence of **unilateral nasal obstruction, foul-smelling nasal discharge, and intermittent nasal bleeding** strongly suggests a **nasal foreign body**, which is common in young children.

b. Differential Diagnoses (D/D):

1. **Nasal Foreign Body** (most likely cause).
2. **Chronic Sinusitis** (if there is prolonged mucopurulent discharge).
3. **Deviated Nasal Septum with Mucosal Injury** (can cause obstruction and bleeding).
4. **Nasal Polyp** (though rare in young children).
5. **Rhinoscleroma or Other Infections** (if chronic, but rare in a 3-year-old).

c. Treatment Approach:

1. **Confirm Diagnosis via Examination:**
   - Perform **anterior rhinoscopy** or **nasal endoscopy** to identify and locate the foreign body.
2. **Removal of the Foreign Body:**
   - If visible, use **nasal forceps**, **suction catheter**, or **Katz extractor**.
   - If deeply impacted, refer for **ENT specialist removal under local/general anesthesia**.
3. **Antibiotic & Supportive Care:**
   - **Topical antibiotic drops** (e.g., mupirocin) to prevent secondary infection.
   - **Oral antibiotics** if infection is present (e.g., amoxicillin-clavulanic acid).
4. **Parental Education & Prevention:**
   - Advise parents on **preventing small object insertion** into the nose.

A 20 years old female came to ENT OPD with Left Ear discharge for the last 3 years which was scanty and foul smelling. Otoscopic Examination showed left attic perforation. For the last 2 days she is complaining of high grade fever vomiting and headache. She was having 104^0 temperature and neck rigidity.

a. What is your diagnosis?
b. What are D/D?
c. Name two important investigations?
d. Write treatment options on priority basis?

B

b. Differential Diagnoses (D/D):

1. **Meningitis** (due to spread of infection from chronic otitis media).
2. **Brain Abscess** (commonly in the temporal lobe or cerebellum).
3. **Lateral Sinus Thrombophlebitis** (severe headache, fever, and ear infection).
4. **Mastoiditis** (infection spreading to the mastoid bone).
5. **Temporal Bone Osteomyelitis** (infection eroding into the skull base).

A

Chronic Suppurative Otitis Media (CSOM) – Atticoantral type with intracranial complications (likely meningitis or brain abscess).

C

c. Two Important Investigations:

1. **Contrast-Enhanced CT (CECT) or MRI Brain & Temporal Bone**
   - To assess intracranial complications (abscess, sinus thrombosis, or meningitis).
2. **Lumbar Puncture (CSF Analysis) for Meningitis**
   - If meningitis is suspected, analyze CSF for **WBC count, protein, glucose, and culture**.

D

d. Treatment Options (Priority Basis):

1. **Hospital Admission & Supportive Care**
   - **IV Fluids, Fever Control (Paracetamol)**, and **Monitoring**.
2. **IV Broad-Spectrum Antibiotics (Targeting Gram-negative & Anaerobes)**
   - **Ceftriaxone + Vancomycin** (for meningitis).
   - **Metronidazole** (for anaerobic coverage).
3. **Surgical Management (if needed)**
   - **Mastoidectomy** (if mastoiditis or brain abscess is present).
   - **Drainage of Brain Abscess** if confirmed on imaging.
4. **Ear Care & Follow-up**
   - **Aural Toilet** (cleaning ear discharge).
   - **Definitive Surgery (Tympanoplasty/Mastoidectomy)** after infection control.

A 40 year old female presented with difficulty in swallowing for the last two years. On examination she is anaemic and having angular stomatitis and glossitis.

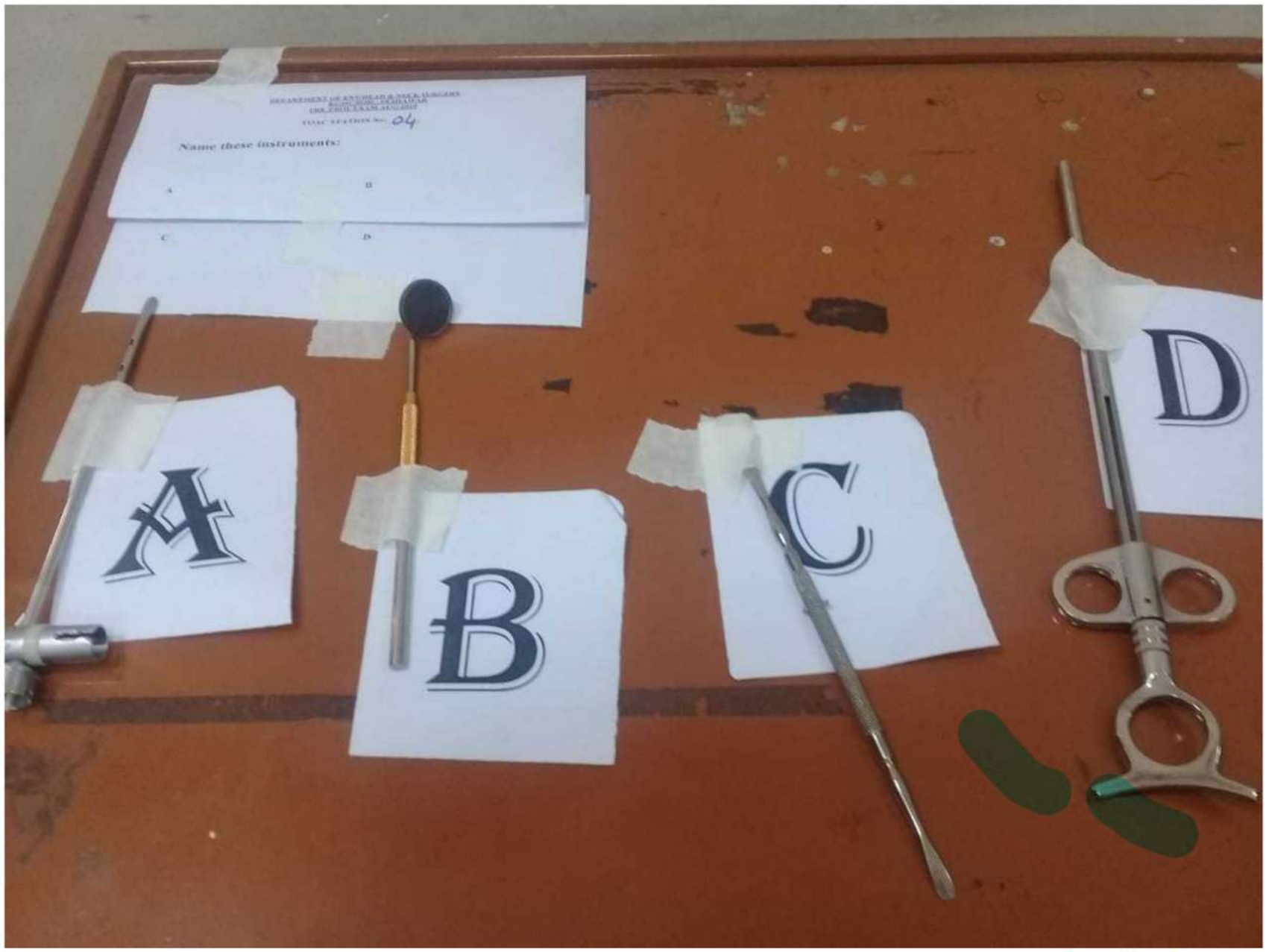
Plummer vinson
Iron Deficiency Anemia
Dysphagia
Esophageal webs
Glossitis and Angular Stomatitis

a. What is the most likely diagnosis?
b. Name three investigations to reach to the diagnosis?
c. Which carcinoma is common in such

1- Plummer Vinson Syndrome

2- CBC
Barium Swallow
Upper GI Endoscopy

3- Esophageal squamous cell carcinoma



A- Bronchoscope → Remember 2 holes present in bronchoscope in lower end while not present in esophagoscope

B- Indirect Laryngoscope

C-

D- Eve's Tonsillar Snare

Posterior rhinoscopy mirror

Uses;

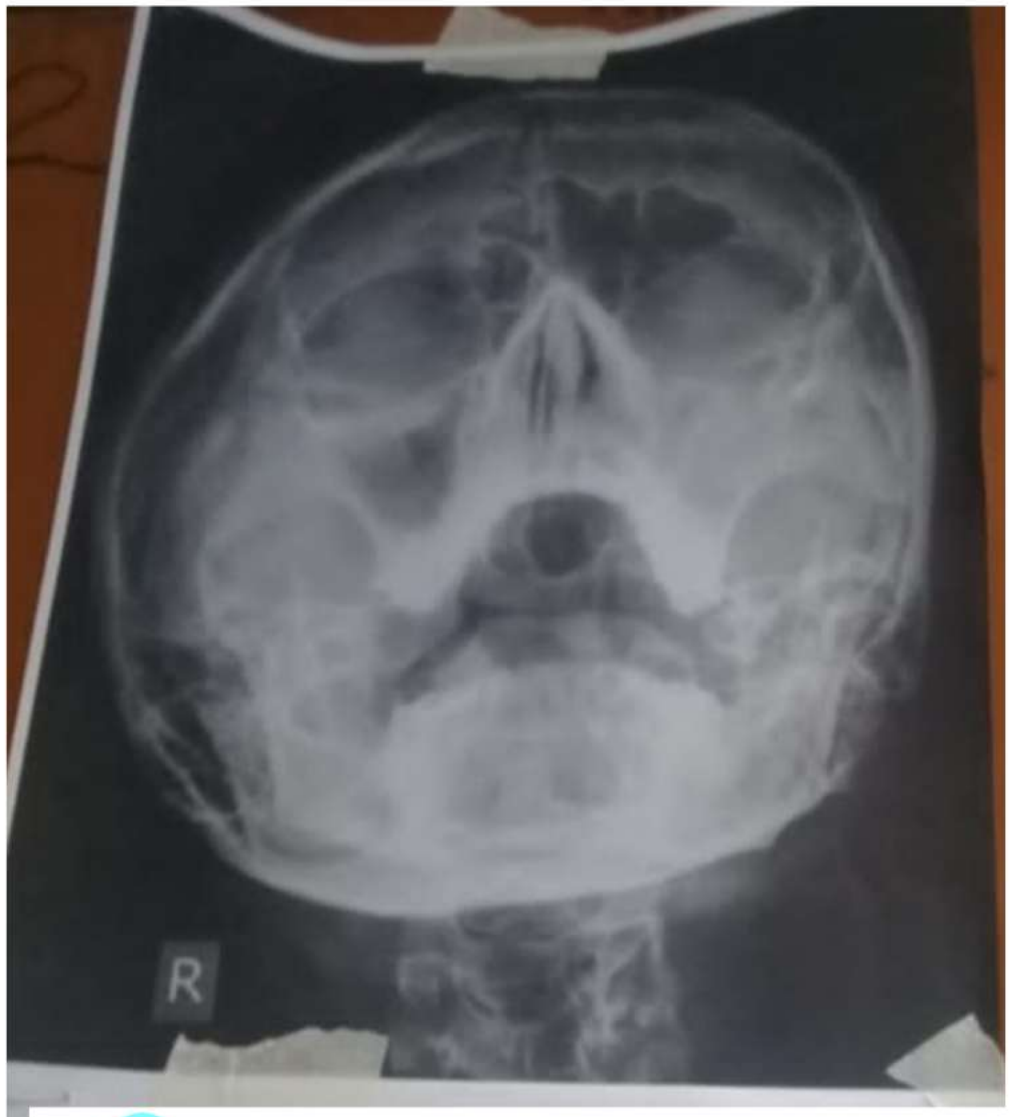
1)Posterior free part of nasal septum, and posterior nasal apertures,lower two terbinates and meati

2)The eustachian tube opening and adenoid s can be seen

Indirect laryngoscope

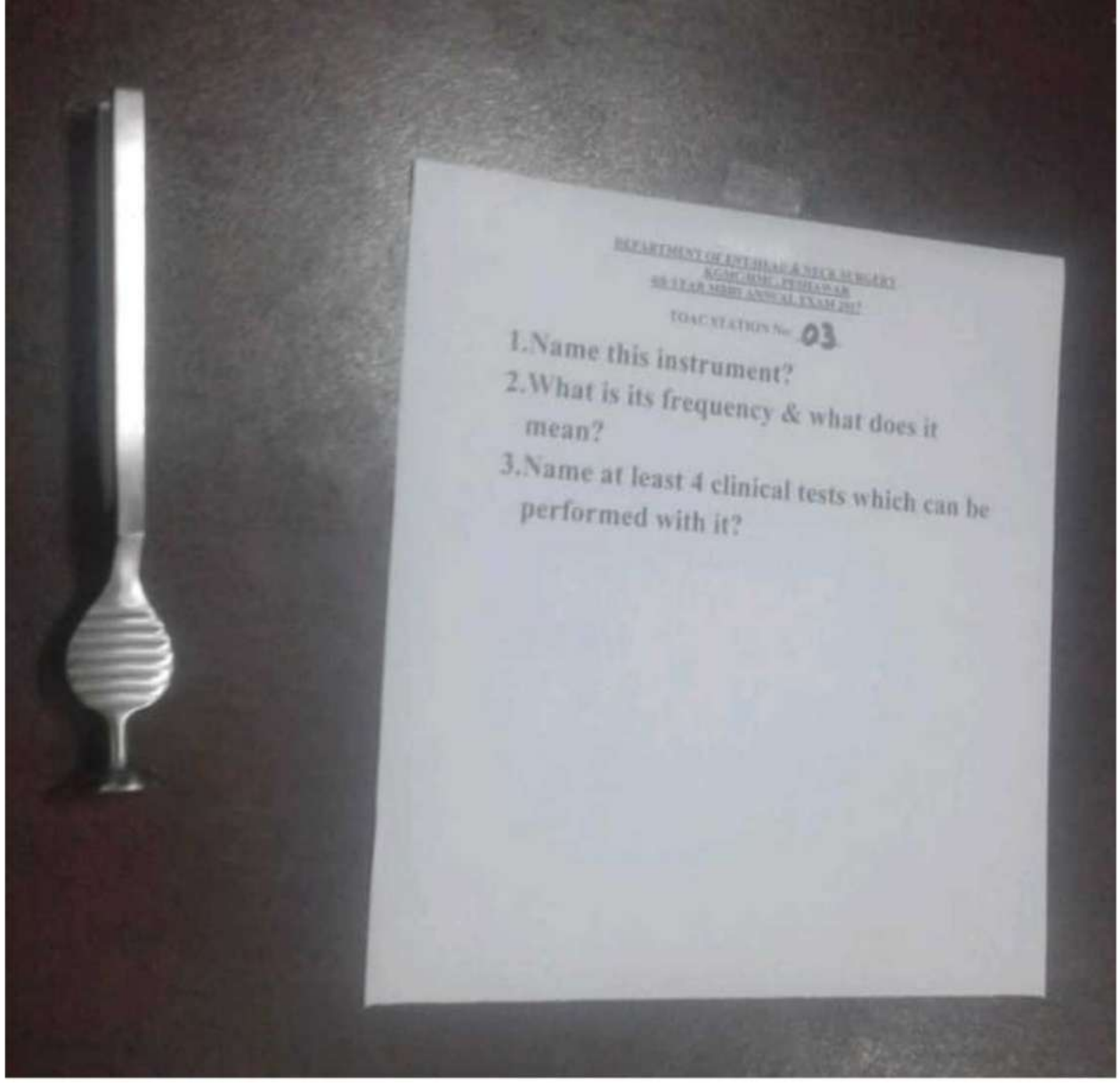
Uses:

To see base of tongue,
vallecula,
epiglottis,
vocal cards,
pyriform fossa
and other parts of larynx.



Confirm if it is Maxillary Sinus opacification or Osteoma (Frontal sinus)

1. **What does this picture show?**
   - This is an X-ray image of the skull (Water's view), typically used for evaluating facial bones, particularly the paranasal sinuses.
2. **Name 4 anatomical structures which can be seen in this picture.**
   - Maxillary sinuses
   - Nasal septum
   - Zygomatic bones
   - Mandible
3. **What abnormalities/findings can you see?**
   - The X-ray appears to show opacification or fluid levels in the maxillary sinuses, which could indicate sinusitis.
   - There might also be evidence of a nasal septal deviation.
   - Possible fractures or bone deformities (if trauma is suspected).
4. **Name 4 surgical procedures as treatment for this condition.**
   - Functional Endoscopic Sinus Surgery (FESS)
   - Caldwell-Luc operation (for chronic maxillary sinusitis)
   - Septoplasty (if nasal septal deviation is present)
   - Sinus drainage procedures (e.g., maxillary sinus puncture)



1- Tuning Fork

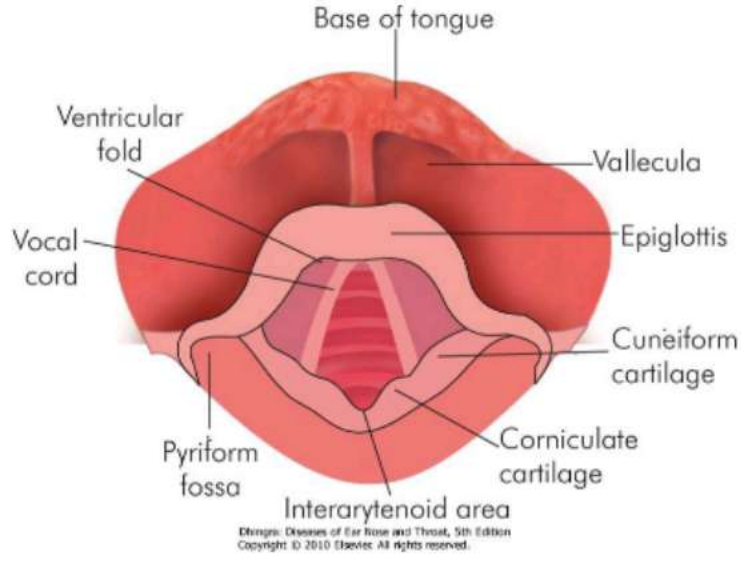
2- MC used → 512 HZ
Most sensitive → 256 HZ

3- Rinner Test
Weber Test
Bone Conduction Test
Vibration Sensation Test

* Blue Tympanic Membrane seen in
  - Serous otitis media
  - Hemotympanum
  - Cholesterol granuloma

Structures seen on indirect laryngoscopy (in order):

- oropharynx
  - Base of the tongue (posterior one-third of the tongue)
  - Vallecula
  - Median and lateral glossoepiglottic folds
- Laryngopharynx
  - Pyriform fossae
  - Post cricoid region
  - Posterior wall
- Larynx
  - Epiglottis
  - Pharyngoepiglottic folds
  - Aryepiglottic folds
  - Arytenoids
  - False vocal cords
  - True vocal cords
  - Tracheal rings



Structures not visible on indirect laryngoscopy

- Laryngeal part of epiglottis
- Apex of piriform fossa
- Vestibule
- Subglottic area
- Posterior cricoid area

Kisselbach's plexus (Little's area)

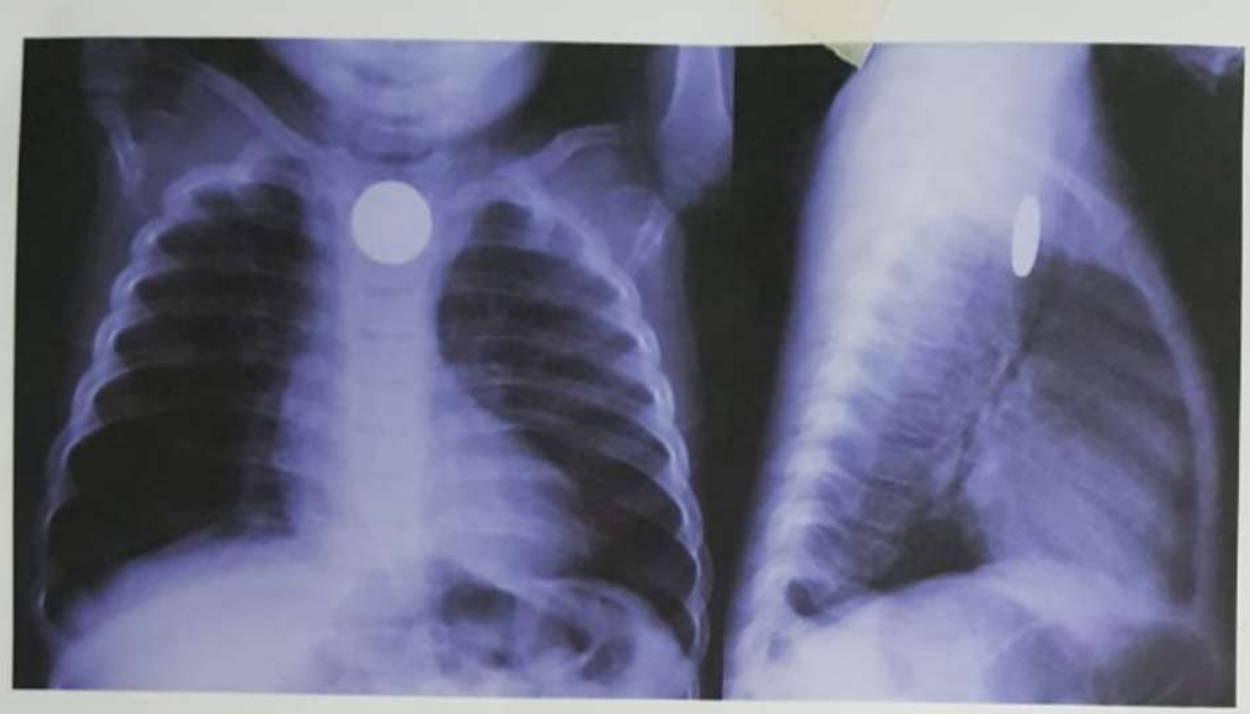
* anterior ethmoidal artery
* sphenopalatine artery
* Greater palatine artery
* Superior labial artery

Posterior ethmoidal artery do not contribute to Kisselbach's plexus

Ligation for epistaxis

* Sphenopalatine artery
* internal maxillary artery
* External carotid artery
* anterior ethmoidal artery

ICA is never ligated bcz it leads to stroke



DEPARTMENT OF ENT/HEAD & NECK SURGERY
KGMC/HMC, PESHAWAR
PRE-PROF EXAM AUG-2019

TOAC STATION No: 09

1.Name the X-rays and finding?

2.Name the nature of the object, the area and site where it is lodged?

3.How it can be treated?

A sixteen years old male who was slapped on his left side face in a fight, presented to ENT OPD with the complaint of decreased hearing in left ear and blood stained discharge since then.

a. What is the most likely diagnosis?
b. What investigations are needed for him?
c. How will you treat this patient?

Hx Ear

D → Duration

O → Onset

P → Progression

A → Association

R → Relieving Factors

A → Aggravating Factors

Hx Nose

DDOOSSEF

D → Discharge

D → Drip (post nasal drip)

O → Olfaction

O → Obstruction

S → Sneezing

S → Snoring

E → Epistaxis

F → Facial pain

Hx Throat

(BESL)

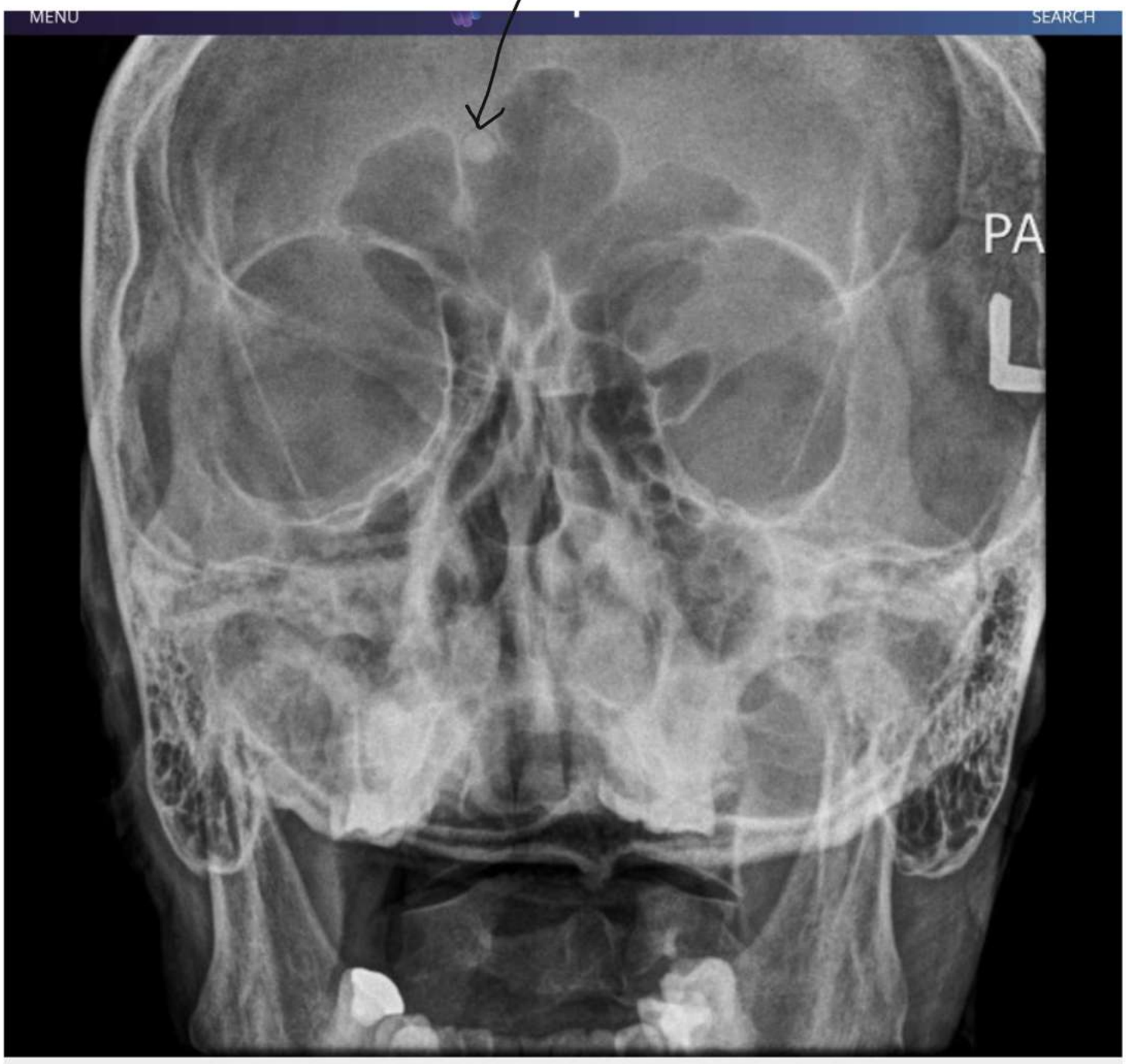
Breathing
- Is it normal?
- Is it painful?

Eating
- Is it normal?
  Is it painful?
  Is taste normal
  Belching
  Regurgitation
  Halitosis

TBRH

Speaking
Any difficulty in Speaking?
Look for patient's hoarseness of voice

Lump



A round hyperdense opacity in the right frontal sinus.

Hypertrophied bilateral inferior nasal turbinates.

Partial filling of the bilateral maxillary sinuses.

Minimal nasal septal deviation with convexity towards right side.

Osteoma in frontal sinus

A hyperdense mass with distinct and lobulated margins is noted in the anterior aspect of the frontal sinus, most consistent with an osteoma.

Osteoma of frontal Sinus