ENT IMP POINTS TO DIAGNOSE SCENARIOS BY MARYAM MALIK (RAWALPINDI MEDICAL COLLEGE PUBLICATION DEPT-RIFAO)

ORAL CAVITY

- 1. APHTHOUS ULCERS: involve moveable mucosa i-e-buccal, tongue, soft palate but NOT hard palate & gingivae, central necrotic area, red halo, frequent recurrence, no constitutional symptoms (fever, malaise, lymphadenopathy)
- 2. VIRAL ULCERS: constitutional symptoms (fever, malaise, lymphadenopathy), lesions can be seen on any area including hard palate & gingivae
- 3. CHRONIC ULCERS= TB, Syphilis, actinomycosis
- 4. MONALIASIS (CANDIDIASIS) = white grey patches when wiped off leave erythematous mucosa or cannot be wiped off, infants, children, immunocompromised adults, topical application of nystatin/clotrimazole
- 5. **BEHCET SYNDROME (OCULO-ORO-GENITAL SYNDROME)**: aphthous like ulcers + genital ulceration + uveitis, punched out ulcer

- 6. ASPIRIN BURN: history of putting aspirin in buccal sulcus against a painful tooth
- 7. ERYTHEMA MULTIFORME: may be associated with sulfonamides, recent herpes simplex infection, vesicles/bullae that rupture to form ulcers covered with pseudo membrane, easy bleeding, and hemorrhagic crusts on the lips.
- 8. BENING MUCOUS MEMBRANE PEMPHIGOID: autoimmune, bulla filled with clear/hemorrhagic fluid which ruptures forms superficial ulcer covered with shaggy collapsed mucosa
- 9. LICHEN PLANUS: with or without skin lesions, skin lesions are pruiritic, purple, polygonal papules on forearms & medial side of thigh, oral lesions have white striae forming lace-like pattern or painful ulcer surrounded by keratotic periphery
- 10. **AGRANULOCYTOSIS** = ulcers in throat + severe neutropenia
- 11. MEDIAN RHOMBOID GLOSSITIS = red rhomboid area devoid of papillae seen on the dorsum of tongue in front of foramen caecum, persistence of tuberculum impar, aymptomatic

- 12. **GEOGRAPHICAL TONGUE**: erythematous area devoid of papillae surrounded by irregular white keratotic outline., lesions keep changing shape, migratory glossitis. Asymptomatic
- 13. HAIRY TONGUE= increased keratin formation, filiform papillae elongated, colored by chromogenic bacteria & look like hair
- 14. FISSURED TONGUE : congenital, syphilis, Vit B complex deficiency, anemia
- 15. MELKERSSON ROSENTHAL SYNDROME: congenital tongue fissures + facial palsy
- 16. ANKYLOGLOSSIA= if tongue can be protruded beyond the lower insicors, it is unlikely to cause speech defects
- 17. FORDYCE SPOTS: aberrant sebaceous glands, under buccal/labial mucosa, shine as yellowish or yellow brown spots
- 18. NICOTINE STOMATITIS: palatal mucosa shows pin-point red spots in the centre of umblicated papular lesions, smokers, misnomer, inflammation of minor salivary glands & opening of their duct as a result to heat of the smoke

- 29. SUBMUCOUS FIBROSIS: intolerance to chilies & spicy food, soreness of mouth with constant burning sensation; worsened during meals, repeated vesicular eruption on palate & pillars Difficulty to open the mouth fully, difficulty to protrude the tongue, trismus, patient may not be able to put his finger in the mouth, brush his teeth, patchy redness of mucous membrane with formation of vesicles that rupture to form ulcers, later blanching of mucosa with loss of suppleness, fibrotic bands, dental caries
- 20. PAPILLOMA: less than 1 cm, pedunculated & white in color
- 21. PHLEBOSTASIS: hemangioma like dilated veins in patient of 40-50 years on oral/lingual mucosa
- 22. TORUS: sub mucous bony outgrowth, hard palate or mandible.
- 23. **PYOGENIC GRANULOMA**: mostly on anterior gingivae, soft, smooth, reddish to purple mass that bleeds on touch.

- 24. GRANULAR CELL MYOBLASTOMA / GRANULAR CELL TUMOR = firm sub mucosal nodule, derived from Schwann cells
- 25. **CONGENITAL EPULIS:** granular cell tumor involving gums of future incisors of female infants
- 26. SOLITARY FIBROUS TUMOR: benign, painless, slow growing, well demarcated, mobile, sub mucosal tumor, 49 yr female mostly, histologically spindle cells arranged in haphazard manner with collagen bundles between cells.
- 27. MUCOCELE: retention cyst of minor salivary gland of lip, soft, cystic mass of bluish color on lower lip mostly
- 28. RANULA: cystic translucent swelling under the tongue in the floor of mouth, blockage of sublingual gland duct. May extend into neck (plunging type)
- 29. **DERMOID:** (sublingual) situated above mylohyoid, NOT TRANSLUCENT, white mass. (sub mental dermoid)= sub mental swelling behind the chin
- 30. **LEUKOPLAKIA**= mainly on buccal mucosa, oral comissures
 - Homogenous = smooth/wrinkled white patch

- nodular (speckled)= nodules on erythematous base
- erosive = erythroleukoplakia
- pre-malignant
- 31. ERYTHROPLAKIA: red patch, 17 time higher malignant potential than leukoplakia, floor of mouth, lower alveolar mucosa, gingivobuccal sulcus.

Homogenous, nodular (speckled), erythroleukoplakia.

- 32. CARCINOMA BUCCAL MUCOSA: asymptomatic initially, later pain, bleeding, trismus, fungating mass over the cheek, foul-smelling bleeding mass in oral cavity
- 33. KAPOSI SARCOMA: AIDS patient, reddish purple nodule on the palate, microscopically spindle cells with hemorrhagic cleft like spaces
- 34. MUMPS: fever (up to 103 F), malaise, parotid gland swelling that subsides in a week, serum amylase increased
- 35. ACUTE SUPPURATIVE PAROTITIS: mostly in elderly, debilitated, dehydrated staph aureas mostly. Sudden onset of severe pain + enlargement

- of parotid gland, movements of jaw aggravate the pain, pus discharge from stenson's duct, fever
- 36. CHRONIC RECURRENT SIALADENITIS: enlarged tender parotid with pus discharge after acute episode over, gland size decrease and is firm, sialography= normal duct system
- 37. SIALECTASIS = dilation of ductal system, similar to CHRONIC RECURRENT SIALADENITIS but differentiated by sialography= dilated ductal system
- 38. TUBERCULAR INFECTION= non-tender mass, fistula formation
- 39. UVEOPAROTID FEVER= sarcoidosis of parotid, fever + enlarged parotid & lacrimal gland + chorioretinitis + cranial nerve palsies
- 40. **ACTINOMYCOSIS**= acute abscess with sinus formation discharging sulfur like granules or as indolent swelling of parotid
- 41. SALIVARY CALCULI: 90% in submandibular, 10% in parotid, intermittent swelling of the involved gland, pain
- 42. PRIMARY SJOGREN SYNDROME/ MIKULICZ DISEASE = xerostomia + xerophthalmia,

- 43. SECONDARY SJOGREN SYNDROME = keratoconjunctivitis sicca + xerostomia + autoimmune connective tissue disorder (RA, SLE), SS-A, SS-B antibodies, schirmer's test.
- 44. MALIGNANT TUMOR OF SALIVARY GLAND=
 rapid growth + restricted mobility + fixity of
 overlying skin + pain + facial nerve involvement.
- 45. HEMANGIOMAS= most common benign tumor of parotid in children, soft, painless, increase in size with crying or straining, bluish discoloration of overlying skin
- 46. FREY'S SYNDROME (GUSTATORY SWEATING) = late complication of parotid surgery, sweating & flushing of preauricular skin during mastication.

PHARYNX

1. ADENOIDS = nasal obstruction + mouth breathing + feeding/sucking difficulty in child + nasal discharge (wet bubbly nose) + chronic maxillary sinusitis + epistaxis + toneless voice loss of nasal quality of voice + tubal obstruction + retracted tympanic membrane + conductive hearing loss + serous otitis media + recurrent attack of ASOM/ CSOM fails to resolve + adenoid Facies(elongated face, dull expression, open mouth, prominent & crowded upper teeth, hitched up upper lip, pinched-in appearance of nose, high arched hard palate + aprosexia (lack of concentration) + pulmonary hypertension/cor-pulmonale

- 2. ACUTE NASOPHARANGITIS = dryness & burning of the throat above the soft palate + pain & discomfort localized to back of nose + dysphagia + fever + cervical lymphadenopathy + congested swollen mucosa covered with whitish exudates
- 3. CHRONIC NASOPHARANGITIS = Post nasal discharge + crusting with irritation at the back of nose + constant desire to clear the throat by hawking or inspiratory snorting + congested mucosa & mucopus or dry crusts.(children have usually chronic adenoiditis)
- 4. THORNWALDT'S DISEASE (PHARYNGEAL BURSITIS) = persistent post nasal discharge + crusting in nasopharynx + nasal obstruction + tubal occlusion + serous otitis media + dull type occipital headache + recurrent sore throat + low grade fever + cystic & fluctuant swelling in posterior wall of nasopharynx

- 5. NASOPHARYNGEAL FIBROMA (JUVENILE
 NASOPHARYNGEAL ANGIOFIBROMA) = thought to
 be testosterone dependent. Male (10-20 yr) +
 profuse,recurrent,spontaneous epistaxis (cannot be
 controlled by application of adrenaline) +
 progressive nasal obstruction & denasal speech +
 conductive hearing loss & serous otitis media +
 benign & locally infiltrative tumor + pink/purple
 smooth mass + consistency firm but digital
 palpation should never be done until at the time of
 operation + broadening of nasal bridge + proptosis
 + frog-face deformity + swelling of cheek +
 involvement of 2,3,4,6 cranial nerve may be there +
 antral sign/ Holman-Miller sign
- 6. NASOPHARANGEAL CARCINOMA: more prevalent in Chinese, nasal obstruction + nasal discharge + rhinolalia clausa (denasal speech) + epistaxis + tubal occlusion + conductive hearing loss + serous otitis media/ ASOM (presence of unilateral serous otitis media in an adult should raise the suspicion of nasopharyngeal growth) + lump of nodes between angle of jaw & mastoid & some nodes

along spinal accessory nerve in posterior triangle of neck

- Squint & diplopia (CN 6)
- Ophthalmoplegia (CN 3,4,6)
- Facial pain & reduced corneal reflex (CN 7)
- Exophthalmus & blindness (CN 2)
- Jugular foramen syndrome (CN 9,10,11)
- Tongue atrophy (CN 12)
- Horner syndrome (CERVICAL SYMPATHETIC CHAIN)
- Trotter's triad {conductive deafness(Eustachian tube blockage) + ipsilateral temporoparietal neuralgia(CN5) + palatal paralysis(CN10) }

SYMPTOMS IN ORDER OF PRIORITY

- CERVICAL LYMPHADENOPATHY
- HEARING LOSS
- NASAL OBSTRUCTION
- EPISTAXIS
- CN PALSIES (MOST COMMON = CN 6)
- HEADACHE
- EARACHE
- NECK PAIN
- WEIGHT LOSS
- 7. ACUTE PHARYNGITIS = CLASSICAL FEATURES=
 - Mild= throat discomfort + low grade fever + congested pharynx + no lymphadenopathy (viral are usually mild)
 - Moderate & severe= throat pain + dysphagia + headache + high fever + pharynx shows
 Erythema + exudates + enlarged tonsils & lymphoid follicles (bacterial are usually severe but gonococcal is mild/asymptomatic)
 - Very severe= cervical lymphadenopathy +
 edema of soft palate & uvula

- a) HERPANGINA = CHARACTERISTIC FEATURES OF ACUTE PHARYNGITIS + vesicular eruption on soft palate & pillars
- b) INFECTIOUS MONONUCLEOSIS =
 CHARACTERISTIC FEATURES OF ACUTE
 PHARYNGITIS + splenomegaly + hepatitis
- c) CMV = CHARACTERISTIC FEATURES OF ACUTE
 PHARYNGITIS + immunosuppressed transplant
 patients
- d)PHARYNGOCONJUNCTIVAL FEVER=
 CHARACTERISTIC FEATURES OF ACUTE
 PHARYNGITIS + conjunctivitis + pain abdomen
 mimicking appendicitis
- e) ACUTE LYMPHONODULAR PHARYNGITIS =
 CHARACTERISTIC FEATURES OF ACUTE
 PHARYNGITIS + white-yellow solid nodules on
 posterior pharyngeal wall
- f) MEASLES = CHARACTERISTIC FEATURES OF ACUTE PHARYNGITIS + koplik spots
- 8. CHRONIC PHARYNGITIS: discomfort/pain in throat (esp. in morning) + foreign body sensation in throat + tiredness of voice + cough + congestion of pharynx & engorged vessels + increased mucous

- secretion (in chronic catarrhal pharyngitis), reddish nodules & hypertrophied lateral pharyngeal bands (chronic hypertrophic granular pharyngitis)
- 9. ATROPHIC PHARYNGITIS = dryness & discomfort in throat + hawking + dry cough + dry & glazed pharyngeal mucosa covered with crusts + foul smell
- 10. KERATOSIS PHARYNGITIS = horny excrescences on the surface of tonsils ,pharyngeal wall or lingual tonsils + white/yellowish dots firmly adherent, can't be wiped off + NO INFLAMMATION & NO CONSTITUTIONAL SYMPTOMS, Spontaneous regression
- 11. ACUTE TONSILLITIS = sore throat + difficulty swallowing + fever + constitutional symptoms + foetid (foul-smell) breath & coated tongue + hyperemia of pillars, soft palate & uvula + red swollen tonsils with yellow spots of purulent material (acute follicular tonsillitis), whitish membrane that can be wiped (acute membranous tonsillitis), meet in midline along with edema of uvula & soft palate (acute parenchymatous tonsillitis) + tender enlarged jugulodigastric nodes

- 12. FAUCIAL DIPHTHERIA = grey-white pseudo membrane that bleeds when removed + tender enlarged jugulodigastric nodes + bull-neck appearance
- 13. CHRONIC TONSILLITIS = recurrent attacks of sour throat + chronic irritation in throat with cough + bad taste in mouth + halitosis (foul breath) + thick speech + dysphagia + choking spells at night + flushing of anterior pillars compared to rest of pharyngeal mucosa + enlarged NONTENDER jugulodigastric nodes
- 14. ACUTE LINGUAL TONSILLITIS = unilateral dysphagia + feeling of lump in throat + enlarged congested lingual tonsil
- 15. ABSCESS OF LINGUAL TONSIL = severe unilateral dysphagia +excessive salivation + protrusion of tongue is painful + tender enlarged jugulodigastric nodes + risk of laryngeal edema
- 16. PAROTID ABSCESS = dehydration + 5-7 days

 after operation + swelling, redness & tenderness

 over parotid area & angle of mouth + mostly

 unilateral + fluctuation difficult to elicit + high fever

- 17. LUDWIG'S ANGINA = odynophagia + trismus + submandibular & sub mental regions swollen & tender & impart woody hard feel + tongue pushed upwards & backwards + risk of laryngeal edema
- 18. PERITONSILLAR ABSCESS (QUINSY) = mostly
 adults + high grade fever & constitutional
 symptoms + unilateral severe pain in throat +
 odynophagia + saliva dribbles out of mouth + hot
 potato voice + foul breath + ipsilateral earache +
 trismus + tonsil, pillars & soft palate congested &
 swollen + swollen edematous uvula pushed to
 other side + bulging of soft palate & anterior pillar
 above tonsil + mucopus over tonsillar region +
 cervical lymphadenopathy + torticollis
- 19. ACUTE RETROPHARANGEAL ABSCESS: child below 3 years usually + dysphagia + difficulty breathing + striador + croupy cough + torticollis + bulge in posterior pharyngeal wall usually on one side of midline + lateral view radiograph shows widening of prevertebral shadow &possibly even the presence of gas

- 20. CHRONIC RETROPHARANGEAL ABSCESS: discomfort in throat + posterior pharyngeal wall shows fluctuant swelling centrally or on one side of midline + tuberculous nodes in neck + caries of cervical spine may be present.
- 21. PARAPHARANGEAL ABSCESS: fever +
 odynophagia +sore throat + torticollis + signs of
 toxemia + (anterior compartment infection =
 prolapse of tonsil & tonsillar fossa, trismus, external
 swelling behind angle of jaw) + (post compartment
 infection = bulge of pharynx behind posterior pillar
 + paralysis of CN 9,10,11,12 & sympathetic chain +
 swelling of parotid region)
- 22. MUCOUS CYST IN OROPHARYNX : seen in vallecula usually + yellow + foreign body sensation in throat
- 23. STYALGIA (EAGLE SYNDROME) = elongated styloid process / calcification of stylohyoid ligament + pain in tonsillar fossa & upper neck that radiates to ipsilateral ear & aggravated on swallowing + transoral palpation of styloid process in tonsillar fossa

- 24. CARCINOMA PYRIFORM SINUS = mostly males above 40 years +something sticking in throat + pricking sensation on swallowing + referred otalgia + odynophagia + mass of lymph nodes high up in neck + hoarseness + laryngeal obstruction
- 25. CARCINOMA POSTCRICOID REGION = females +
 Paterson brown Kelly/Plummer Vinson syndrome +
 progressive dysphagia + weight loss + voice change
 + aphonia + edema & Erythema of post cricoids
 region & pooling of secretions in hypo pharynx are
 suggestive of growth. + loss of laryngeal crepitus +
 increased pre-vertebral shadow in lateral
 radiograph

- 26. CARCINOMA POSTERIOR PHARYNGEAL WALL:

 males above 50 years + dysphagia + spitting of

 blood + palpable mass of nodes in neck without any

 symptom pointing to primary tumor + indirect

 mirror examination often reveals the tumor
- 27. PHARYNGEAL POUCH /HYPOPHARYNGEAL
 POUCH / ZENKER'S DIVERTICULUM: it is pulsion
 diverticulum where pharyngeal mucosa herniates
 through the killian's dehiscence + after 60 yrs of age
 + dysphagia + gurgling sound on swallowing +
 regurgitation of food at night + cough + aspiration
 pneumonia + associated hiatus hernia.

LARYNX:

1.ACUTE LARYNGITIS= hoarseness + throat discomfort/pain particularly after talking + dry irritating cough wore at night usually + constitutional symptoms if laryngitis is followed by viral infection + earlier Erythema & edema of epiglottis, aryepiglottic folds, arytenoids, ventricular bands but vocal cords appear white & near normal & stand out in contrast to surrounding mucosa, later= hyperemia, swelling

- increased & vocal cords red &7 swollen + sticky secretions between cord and interarytenoid region + (vocal abuse= sub mucosal hemorrhages on vocal cords)
- 2. ACUTE EPIGLOTTICUS (SYN.SUPRAGLOTTIC LARYNGITIS) = 2-7 yrs + can affect adults + sore throat & dysphagia (in adults), dyspnea & striador (in children) + high grade fever + red swollen epiglottis (tongue depressor used) + edema & congestion of supraglottic structures (IDL performed in OT only) + thumb sign in x-ray lateral view + hemophilus influenza type B
- 3. ACUTE LARYNGO-TRACHEO-BRONCHITIS = 6
 month- 3yrs children + hoarseness + croupy
 cough (barking seal-like) + low grade fever +
 difficulty breathing + inspiratory striador +
 steeple sign on X-ray anteroposterior view +
 parainfluenza type 1,2
- 4. EDEMA OF LARYNX = involves supraglottic & subglottic region + airway obstruction + inspiratory striador + edema of supraglottic & subglottic region (IDL in adults /DL in children)

- 5. CHRONIC HYPEREMIC LARYNGITIS = hoarseness + aphonia by end of the day + constant hawking + cough + throat discomfort + hyperemia of laryngeal structures + dull red rounded vocal cords + flecks of viscid mucous seen on vocal cords & interarytenoid region.
- 6. CHRONIC HYPERTROPHIC LARYNGITIS

 (SYN.CHRONIC HYPERPLASTIC LARYNGITIS) =

 male + 30-50 yr + hoarseness + constant hawking
 + cough + throat discomfort + dusky red
 thickened laryngeal mucosa + swollen red
 rounded vocal cords later show nodular
 appearance + red swollen ventricular bands may
 be mistaken for prolapse/eversion of ventricle +
 impaired mobility of cords
- 7. POLYPLOID DEGENERATION OF VOCAL CORDS

 (REINKE'S EDEMA) = middle aged + edema of sub
 epithelial space (reinke's space) of vocal cords +
 hoarseness + low pitched rough voice (false cords
 used) + vocal cords appear as fusiform swellings
 with pale translucent look + ventricular bands
 hyperemic & hypertrophic

- 8. PACHYDERMIA LARYNGIS = form of chronic hypertrophic laryngitis affection posterior part of larynx in region of inter arytenoids & post part of vocal cords. + hoarseness + husky voice + throat irritation + IDL = heaping up of red/ grey granulation tissue in inter arytenoids & post part of vocal cords + contact ulcer + bilateral & symmetrical + no malignant change + forceful talking + gerd
- 9. ATROPHIC LARYNGITIS (LARYNGITIS SICCA) =
 women + hoarseness of voice which temporarily
 improves on cough + atrophic mucosa covered
 with foul smelling crusts + mucosa may show
 bleeding
- 10. TB OF LARYNX = weakness of voice +
 hoarseness + pain radiating to ears +
 odynophagia + hyperemia of vocal cord +
 impairment of adduction + mamillated
 appearance (swelling in inter arytenoids region) +
 mouse-nibbed appearance + superficial ragged
 ulceration on arytenoids & inter arytenoids
 region + granulation tissue in & inter arytenoids
 region or vocal process of arytenoids + turban

- epiglottis + swelling of ventricular bands & aryepiglottic folds + marked pallor of surrounding mucosa
- 11. LUPUS OF LARYNX = anterior part of larynx involved + epiglottis may be completely destroyed + painless + asymptomatic + no pulmonary TB.
- 12. SYPHILIS OF LARYNX = gumma of tertiary stage seen
- 13. LEPROSY OF LARYNX = diffuse nodular infiltration of epiglottis, aryepiglottic folds & arytenoids
- 14. SCLEROMA OF THE LARYNX =klebsiella rhinoscleromatis + smooth red swelling in subglottic region + hoarseness + dyspnea + wheezing
- STRIADOR) = birth or soon after & subsides by 2
 yrs + most common congenital anomaly of larynx
 + flaccidity of supraglottic larynx + striador that
 increases on crying & decreases on prone
 position + normal cry + omega shaped epiglottis +
 floppy aryepiglottic folds + prominent arytenoids

- 16. CONGENITAL SUBGLOTTIC STENOSIS=
 abnormal thickening of cricoids cartilage /fibrous
 tissue seen below vocal cords + normal cry +
 subglottic diameter less than 4mm in full term
 neonate (normal = 4.5-5.5mm) or 3 mm in
 premature neonate (normal = 3.5 mm) +
 asymptomatic + URTI causes dyspnea & striador
- 17. LARYNGEAL WEB = web seen between vocal cords and has a concave posterior margin + air way obstruction + weak cry/aphonia dating from birth
- 18. SUBGLOTTIC HEMANGIOMA = striador + normal cry + crying increases airway obstruction + reddish blue mass below vocal cords (DL)
- 19. LARYNGOESOPHAGEAL CLEFT = repeated aspiration & pneumonitis + coughing, choking, cyanosis at time of birth
- 20. LARYNGOCELE = dilation of saccule + trumpet players, glass blowers, weight lifters + external laryngocele presents as reducible swelling which increases in size on coughing or Valsalva

- 21. LARYNGEAL CYST = arise in aryepiglottic fold + bluish, fluid filled, smooth swelling in supra glottis larynx + respiratory obstruction
- 22. UNILATERAL RECURRENT LARYNGEAL NERVE

 PARALYSIS = median/paramedian position of vocal cord (SEMON'S LAW, WAGNER & GROSSMAN HYPOTHESIS) + bronchogenic Ca imp cause of left recurrent paralysis + change in voice that gradually improves due to compensation by healthy cord.
- 23. BILATERAL RECURRENT LARYNGEAL NERVE

 PARALYSIS= neuritis or thyroidectomy are imp

 causes + median/paramedian position of vocal

 cord + dyspnea + striador + good voice
- 24. UNILATERAL SUPERIOR LARYNGEAL NERVE

 PARALYSIS = weak voice + pitch cannot be raised + occasional aspiration + askew position of glottis + shortening of cord with loss of tension, paralyzed cord appears wavy due to lack of tension + flapping of the paralyzed cord
- 25. BILATERAL SUPERIOR LARYNGEAL NERVE
 PARALYSIS = cough + choking fits + weak & husky
 voice

- 26. UNILATERAL COMBINED PARALYSIS

 (RECURRENT & SUP-LARYNGEAL NERVE) =

 thyroid surgery is most common cause +

 cadaveric position of vocal cord i-e- 3.5 mm from

 midline + hoarseness + aspiration of liquids +

 cough is ineffective due to air waste
- 27. BILATERAL COMBINED PARALYSIS (RECURRENT & SUP-LARYNGEAL NERVE) = aphonia + aspiration + inability to cough + bronchopneumonia
- 28. VOCAL NODULES/ SINGER'S/ SCREAMER'S

 NODULE = vocal trauma when person speaks in unnatural low tone for prolonged period or at high intensity + teachers/actors/vendors/pop singers/ school children who are too assertive & talkative + initially soft, reddish, edematous swelling later become grayish or white in color typically formed at junction of anterior one-third with post 2/3 rd s of vocal cord. Hoarseness + vocal fatigue + pain in neck on prolonged phonation
- 29. VOCAL POLYP = men + 30-50 yrs + caused by sudden shouting resulting in hemorrhage of vocal cord & subsequent sub mucosal edema +

hoarseness + dyspnea + striador + intermittent choking + diplophonia (double voice) + soft,smooth,often pedunculated unilateral

- 30. JUVENILE PAPILLOMATOSIS (SYN.RESPIRATORY PAPILLOMATOSIS) = most common benign neoplasm of larynx in children+ HPV type 6 & 11, child 3-5 years + hoarseness / aphonia + respiratory difficulty + striador.
- 31. SUPRAGLOTTIC CARCINOMA = throat pain, dysphagia, referred pain in ear, mass of lymph nodes in neck -> hoarseness (late symptom) -> weight loss, respiratory obstruction & halitosis.
- 32. GLOTTIC CARCINOMA = hoarseness of voice (early sign) -> striador & laryngeal obstruction
- 33. SUBGLOTTIC CARCINOMA = striador or laryngeal obstruction (earliest) -> hoarseness (late feature)
- 34. DYSPHONIA PLICA VENTRICULARIS

 (VENTRICULAR DYSPHONIA) = voice produced by false cords, rough, low-pitched and unpleasant
- 35. FUNCTIONAL APHONIA (HYSTERICAL APHONIA)=females + 15-30 yr + sudden aphonia

- + whispering + sound of cough is good + vocal cords are seen in abducted position & fail to adduct on phonation but can be adducted on cough indicating normal function.
- 36. PUBERPHONIA (MUTATIONAL FALSETTO

 VOICE) = presence of childhood high pitched voice in adult males + gutzmann's pressure test
- 37. PHONOASTHENIA = weakness of voice due to fatigue of phonatory muscles (thyroarytenoid & interarytenoid). IDL=
 - Weakness of thyroarytenoid= elliptical space between cords
 - Weakness of interarytenoid= triangular gap near posterior comissures
 - Weakness of thyroarytenoid & interarytenoid= key hole appearance of glottis.
- 38. HYPONASALITY (RHINOLALIA CLAUSA) = lack of nasal resonance (nasal polyp, adenoids etc)
- 39. HYPERNASALITY (RHINOLALIA APERTA) = more nasal resonance (eg cleft of soft palate,oronasal fistula etc)

- 40. STUTTERING = disorder of fluency of speech + hesitation to start + repetitions + prolongation/blocks + facial grimacing + eye blink + abnormal head movement.
- 41. VEGETAL BRONCHITIS = edema & congestion of trachea-bronchial mucosa due to vegetable or foreign bodies like peanuts, beans, seeds that set up a diffuse reaction.

EAR

- 1. BENIGN PAROXYSMAL POSITIONAL VERTIGO=

 vertigo when head is placed in certain critical
 position + no hearing loss + no neurological
 symptoms. It is disorder of posterior semicircular
 canal, diagnosis= hall pike maneuver, treatment=
 epley's maneuver.
- 2. MENIERE'S DISEASE(ENDOLYMPHATIC HYDROPS) = episodic vertigo(few min- 24 hr or so) + fluctuant hearing loss + tinnitus + aural fullness
- 3. VESTIBULAR NEURONITIS = due to virus attacking vestibular ganglion + severe vertigo of sudden onset (few days to 2 or 3 weeks) + NO cochlear symptoms.

- 4. SYPHILIS OF INNER EAR = sensorineural hearing loss + dizziness (congenital syphilis resemble menier disease but has positive HENEBERT'S SIGN (positive fistula test in presence of intact tympanic membrane)
- 5. LABYRINTHITIS= transient vertigo often induced by pressure o tragus + diagnosed by fistula test + spontaneous nystagmus (quick component towards diseased ear= diffuse serous labyrinthitis) (quick component towards healthy ear= diffuse suppurative labyrinthitis)
- 6. ACOUSTIC NEUROMA = arises from CN 8 within internal acoustic meatus. Progressive unilateral sensorineural hearing loss (bilateral in menier) + Tinnitus + difficulty in discrimination of speech + imbalance/unsteadiness (not true vertigo as in menier's) + CN INVOLVEMENT (5th =earliest to be involved shows tumor is in cerebellopontine angle (2.5cm) +6th nerve =hitzelberg sign, 9 & 10 nerve, 11, 12,3,4,5 CN)
 Ataxia, numbness, weakness (brainstem involvement)

- Cerebellar involvement (nystagmus vertical or direction changing (horizontal in menier)
 Raised ICP
- 7. VENTROBASILAR INSUFFICIENCY = common cause of central vertigo + patients over age of 50 years + atherosclerosis + transient ischemia + abrupt vertigo lasting several minutes + nausea & vomiting + drop attacks + visual disturbances + hemiparieses.
- 8. POSTEROINFERIOR CEREBELLAR ARTERY

 (PICA)SYNDROME (WALLENBERG SYNDROME) =

 thrombosis of PICA + violent vertigo +

 diplopia,dysphagia,hoarseness + Horner syndrome

 + sensory loss on ipsilateral side of face & contra

 lateral side of body + ataxia + horizontal or rotator

 nystagmus
- 9. BASILAR MIGRAINE = unilateral throbbing occipital headache + adolescent girls + family history + menstrual history + aura
- 10. MULTIPLE SCLEROSIS = demylinating disease + young adults + vertigo + dizziness + paresthesias + dysarthria + blurring or loss of vision + ataxia + spontaneous nystagmus + acquired pendular

- nystagmus + dissociated nystagmus + vertical upbeat nystagmus
- 11. CERVICAL VERTIGO = vertigo following injuries of neck 7-10 days after the accident + tenderness of neck + spasm of cervical muscles
- 12. OCULAR VERTIGO = in case of acute extra ocular muscle pariesis or high errors of refraction
- 13. PSYCHOGENIC VERTIGO = anxiety related symptoms + floating/swimming sensation /light headedness + no nystagmus + no hearing loss + exaggerated response of caloric test
- 14. HAEMATOMA OF AURICLE = collection of blood between auricular cartilage & perichondrium + blunt trauma + cauliflower ear (pugilistic/boxer's ear)
- 15. **PERICHONDRITIS**= red hot painful pinna that feels stiff -> abscess -> necrosis of cartilage
- 16. RELAPSING POLYCHONDRITIS = rare autoimmune disease + entire auricle except lobule becomes tender & inflamed. + stenosis of external auditory canal
- 17. CHONDRODERMATITIS NODULARIS CHRONICA

 HELICIS = men + 50 yr + painful nodules near free

- border of helix + tender + inability to sleep on affected side
- 18. COLLAURAL FISTULA = abnormality of first branchial cleft + one opening below & behind angle of mandible & second in external canal/ middle ear.
- 19. FURUNCLE (LOCALIZED OTITIS EXTERNA) =
 staphylococcal infection + only in cartilaginous part
 + severe pain & tenderness out of proportion to
 size of furuncle + painful movements of pinna &
 jaw. + enlarged tender periauricular lymph nodes +
 in case of recurrent furuncles diabetes should be
 excluded & attention paid to nasal vestibules that
 may harbor staph.
- 20. DIFFUSE OTITIS EXTERNA = diffuse inflammation of meatal skin + hot.humid climate + swimmers
 - Acute= hot burning sensation in ear -> pain increasing with jaw movements -> ear discharge (serous-> thick ,purulent) ,hearing loss, lymphadenopathy

- Chronic = irritation & strong desire to itch + scanty discharge -> crusts, meatal skin shows fissuring & meatal stenosis
- 21. OTOMYCOSIS= intense itching + discomfort/pain in ear + watery discharge with musty odor & ear blockage. Aspergillus= black headed filamentous growth, A.fumigatous= pale blue/green, Candida= white/ creamy deposit + fungus likened to a filter paper
- 22. OTITIS EXTERNA HEMORRHAGICA =
 hemorrhagic bullae on tympanic membrane &
 deep meatus + influenza epidemics + pain in ear +
 blood stained discharge
- OTITIS EXTERNA = pseudomonas + diabetic/
 immunocompromised + excruciating pain +
 granulations in ear canal + facial paralysis +
 multiple cranial nerve palsies... severe otalgia in an
 elderly diabetic patient with granulation tissue in
 external ear at cartilaginous- bony junction should
 alert physician of malignant otitis externa
- 24. IMPACTED WAX OR CERUMEN= onset of symptoms when water enters ear canal + impaired

hearing + sense of blocked ear + tinnitus + giddiness + reflex cough + wax granuloma (long standing case)

- 25. RETRACTED TYMPANIC MEMBRANE =

 Eustachian tube blockage + dull lusterless + cone of light absent/interrupted + lateral process of malleus prominent, handle of malleus shortened + ant & post malleolar folds sickle shaped
- 26. TYMPANOSCLEROSIS = chalky white plaque
- **27. ASOM** = 5 stages
 - Tubal occlusion = deafness + earache + retracted tympanic membrane
 - Presuppuration= increased deafness + earache
 + disturbed sleep + fever (child) + tinnitus
 (adults) + cart-wheel appearance of tympanic
 membrane
 - Suppuration= very severe deafness + earache, children with fever and convulsions + red bulging tympanic membrane with loss of landmarks, yellow spot at area of immanent rupture
 - Resolution= decreased deafness + earache,
 blood tinged discharge that later becomes

- mucopurulent +no hyperemia of tympanic membrane
- Complication= acute mastoiditis, subperiosteal abscess, labyrinthitis etc
- 28. ACUTE NECROTIZING OTITIS MEDIA = profuse otorrhea + other symptoms of ASOM, cholesteatoma on tympanic membrane
- 29. OTITIS MEDIA WITH EFFUSION= hearing loss (20-4-db) + children 5-8 yrs + delayed & defective speech + mild ear ache + history of URTI, dull opaque tympanic membrane + loss of light reflex + yellow/grey.bluish color + thin leash of blood vessels along handle of malleus/ periphery + retracted tympanic membrane/full or slightly bulging in its post part + decreased mobility of tympanic membrane
- 30. **CSOM** = perforation necessary + history of deafness & ear discharge
 - Tubotympanic/mucosal/safe type
 - Aticoantral/ Squamous/unsafe

- 31. TUBERCULAR OTITIS MEDIA = painless ear discharge + foul-smelling + multiple / large single perforation + severe hearing loss
- 32. ACUTE MASTOIDITIS = persistent /recurrent pain behind ear after perforation/treatment of ASOM + persistence of ear discharge beyond 3 weeks + persistent /recurrent fever after treatment of ASOM. + mastoid swelling & tenderness + pulsatile ear discharge (light house effect) + sagging of posterosuperior meatal wall + perforation of tympanic membrane + conductive hearing loss + in x-ray clouding of air cells ,bony partitions between air cell indistinct but sinus place is seen as distinct outline.
- 33. PETROSITIS = GRADENIGO SYNDROME =
 external rectus palsy(CN6) + deep-seated retro
 orbital pain (CN5) + persistent ear discharge
- 34. LATERAL SINUS THROMBOPHLEBITIS

 (SYN.SIGMOID SINUS THROMBOPHLEBITIS) = hectic

 Picket fence type of fever with rigors + headache

 + griensinger's sign + papilloedema.

- 35. OTOSCLEROSIS = females mostly + 20-30 yr old + bilateral conductive deafness + paracusis willisii + tinnitus + monotonous speech + (uncommonly=vertigo) + Schwartz sign + cathart notch
- 36. GLOMUS TUMOR= most common benign tumor of middle ear + systolic bruit over mastoid + rule of 10s= 10% of tumors are familial, 10% multicentric, 10% functional
 - Tumor is intratympanic = conductive hearing loss + tinnitus with swishing character, pulsatile, synchronous with pulse & can be temporarily stopped by carotid pressure, otoscopy= red reflex with intact tympanic membrane + rising sun appearance + pulsation (brown) sign
 - When tumor presents as a polyp = hearing loss
 + tinnitus + profuse bleeding from ear +
 dizziness +vertigo + facial paralysis + otorrhea
 + red vascular polyp which bleeds readily
 - Cranial nerve palsies= 9-12 CN affected
 NOSE

- 1. RHINOPHYMA = also called POTATO TUMOR, hypertrophy of sebecious glands + benign + slow growing+ long standing acne rosacea + pink lobulated mass with superficial vascular dilation.
- 2. BASAL CELL CARCINOMA (RODENT ULCER) = most common malignant tumor + 40-60 years + tips/alae + very slow growth + cyst/papulo-pearly nodule / ulcer with rolled edges.
- 3. SQUAMOUSCELL CARCINOMA = side of nose / columella + 40-60 yrs + infiltrating nodule/ulcer with rolled out edges
- 4. FURUNCLE/BOIL=trauma of picking nose/plucking vibrissae + painful & tender ,skin of dorsum of nose red & swollen
- 5. VESTIBULITIS = trauma of handkerchief + diffuse dermatitis of vestibule + skin of vestibule of nose red & swollen and tender + crusts and scales
- 6. DNS = nasal obstruction + sinusitis + headache + epistaxis + middle ear infection + external deformity + sleep apnea
- 7. SEPTAL HEMATOMA = bilateral nasal obstruction + frontal headache + sense of pressure over nasal

- bridge + smooth rounded swelling of septum that is soft & fluctuant
- 8. SEPTAL ABSCESS = bilateral nasal obstruction + pain & tenderness over nasal bridge + red/swollen skin + bilateral swelling of nasal septum + fluctuation + submandibular nodes enlarged
- 9. SEPTAL PERFORATION = if small= whistling sound on inspiration & expiration, if large= crusts leading to nasal obstruction & epistaxis.
- 10. ACUTE VIRAL RHINITIS = burning sensation at back of nose -> nasal stuffiness ,rhinorrhea & sneezing + low grade fever
- 11. ACUTE BACTERIAL RHINITIS = grayish white tenacious membrane may form in nose -> attempted removal causes bleeding.
- 12. CHRONIC SIMPLE RHINITIS = nasal obstruction
 + thick sticky nasal discharge/post nasal drip + thick
 turbinal mucosa that pit on pressure + shrinkage
 with vasomotor drug +post nasal discharge
- 13. CHRONIC HYPERTROPHIC RHINITIS = nasal obstruction + thick sticky nasal discharge + thick turbinal mucosa that does not pit on pressure + less

- shrinkage with vasomotor drug due to fibrosis + mulberry appearance of inferior turbinate
- 14. ATROPHIC RHINITIS (OZAENA) = females + puberty + merciful anosmia + bilateral nasal obstruction + epistaxis + greenish/grayish black dry crusts + posterior wall of pharynx can be seen + atrophic laryngitis (hoarseness) + hearing impairment + small under developed sinuses (opaque on x-ray)
- 15. RHINITIS SICCA = crust forming disease + hot dry environment + ant 1/3rd of nose esp. septum + Squamous metaplasia of ciliated columnar epithelium
- 16. RHINITIS CASEOSA = unilateral nasal obstruction + offensive purulent discharge + granulomatous sinus mucosa + cheesy material
- 17. RHINOSCLEROMA = klebsiella rhinoscleromatis/Frisch bacillus. 3 stages = atrophic (foul smelling nasal discharge & crusts), granulomatous (woody feel of nose & lip + painless non-ulcerative nodules), cicatrical (stenosis of nares), miculicz cells + russel bodies

- 18. SYPHILIS = primary chancre ->simple rhinitiswith crusting & fissuring -> gumma of nasal septum-> saddle nose deformity
- 19. TB = ant part of nasal septum & ant end of inferior turbinate
- 20. LUPUS VULGARIS = low grade tuberculous infection + apple-jelly nodules
- 21. RHINOSPORIDIOSIS = chronic granulomatous disease + rhinosporidium seeberi + acquired through contaminated water + leafy polyploidy mass pink-purple in color and attached to nasal septum or lateral wall. Vascular + bleeds on touch + white dots representing sporangia of fungus....nasal discharge (blood tinged) + nasal stuffiness / frank epistaxis
- 22. MUCORMYCOSIS = diabetic + black necrotic mass filling the nasal cavity & eroding septum & hard palate.
- 23. WEGENER'S GRANULOMATOSIS = nasal discharge (clear/blood tinged-> purulent) +septal perforation + saddle nose + migratory Arthralgia + involvement of lungs + involvement of kidneys

- 24. FOREIGN BODY = children + unilateral nasal discharge occasionally blood stained) + patient placed in rose position
- 25. RHINOLITH= stone in nasal cavity + adults + nasal discharge (blood tinged) + grey brown/ greenish-black mass with irregular surface & stony hard feel.
- 26. NASAL MYASIS (MAGGOTS IN NOSE)= first 3-4 days= irritation, sneezing, lacrimation, headache, nasal discharge (blood tinged), eyelids & lips become puffy + on 3/4th day maggots crawl out of nose + foul smell + fistula + meningitis + death
- 27. CSF RHINORRHEA = history of head injury/
 intracranial tumor/ nasal or sinus surgery + few
 drops/stream of fluid + cannot be sniffed back +
 sweet taste + more than 30 mg/dl sugar + b2
 transferrin

28. ALLERGIC RHINITIS

 Seasonal = paroxysmal sneezing (10-20 sneezes a time) + nasal obstruction + watery nasal discharge + itching in nose & eyes

- Perennial = frequent colds + persistently stuffed nose + anosmia + post-nasal drip + hearing impairment
- 29. RHINITIS MEDICAMENTOSA = topical decongestant nasal drops -> rebound phenomena
- 30. ETHMOIDAL POLYP = allergy/multifactorial + nasal stuffing + total nasal obstruction + watery discharge + pale ,glistening grape like multiple bilateral masses + insensitive to probe + do not bleed on touch
- 31. ANTROCHOANAL POLYP (SYN.KILLIAN'S POLYP)
 - = cause is infection + usually unilateral nasal
 obstruction + thick dull voice + mucoid nasal
 discharge + Anterior rhinoscopy (nothing/grayish
 mass with nasal discharge/ protruded pinkish mass)
 + posterior rhinoscopy (stalked globular mass filling
 choana or nasopharynx)
- 32. ACUTE MAXILLARY SINUSITIS = frontal headache + pain in upper jaw that may be referred to gums/teeth + tenderness + redness & edema of cheek + ant rhinoscopy (pus in middle meatus) + post nasal discharge + post rhinoscopy= pus on upper soft palate

- 33. ACUTE FRONTAL SINUSITIS = frontal headache + tenderness over frontal sinus area + edema + nasal discharge + vertical streak of mucopus seen high up in anterior part of middle meatus
- 34. ACUTE ETHMOIDAL SINUSITIS = pain over bridge of nose, medial & deep to eye and aggravated by eye movements + edema of lids + increased lacrimation + ant rhinoscopy (pus in middle/ superior meatus) + swelling of middle turbinate.
- 35. ORBITAL CELLULITIS = source is commonly ethmoidal sinus + slow progression + edema lids -> chemosis -> proptosis, CN involved concurrently with complete Ophthalmoplegia + one eye involved
- 36. CAVERNOUS SINUS THROMBOSIS = source can be nose, sinus, orbit, ear, pharynx + abrupt onset + fever, chills, toxemia, edema lids -> chemosis -> proptosis + CN involved + both eyes involved.