Embryology, Anatomy and Congenital Anomalies of Ear

- 1. Ceruminous glands present in the ear are modified apocrine glands.
- 2. Tympanic branch of glossopharyngeal nerve has no sensory supply to the auricle
- 3. Sensory supply of external auditory meatus is by Auriculotemporal nerve, auricular branch of vagus(Arnold nerve), sensory branch of facial nerve.
- 4. Dehiscence of anterior wall of the external auditory canal cause infection in the parotid gland via Fissure of Santorini.
- 5. The color of the normal tympanic membrane is grey.
- 6. The most mobile part of the tympanic membrane is the peripheral part.
- 7. Pars flaccida of the tympanic membrane is also called Shrapnell's membrane.
- 8. Anterior wall of tympanic cavity contain Tensor tympani muscle.
- 9. The distance between tympanic membrane and medial wall of middle ear at the level of center is 2 mm .
- 10. Surface area of tympanic membrane is 90 mm2.
- 11. Lever ratio of tympanic membrane is 1.3 is 1.
- 12. Nerve supply of the tympanic membrane is by Auriculotemporal Nerve .
- 13. Narrowest part of middle ear is mesotympanum.
- 14. Prussak's space is situated in epitympanum.
- 15. Sensory nerve supply of middle ear cavity is provided by Glossopharyngeal Nerve.
- 16. Tegmen separates middle ear from the middle cranial fossa containing temporal lobe of brain by the roof of middle ear.
- 17. Floor of middle ear cavity is in relation with the jugular bulb.
- 18. Promontory seen in the middle ear is the basal turn of cochlea.
- 19. Processus cochleariformis attaches to the tendon of tensor tympani
- 20. Mac Ewan's triangle is the landmark for mastoid antrum.
- 21. The suprameatal triangle overlies the mastoid antrum
- 22. Anatomical landmark indicating position of mastoid antrum is the suprameatal triangle.
- 23. Synovial joint is present between the ossicles of ear.
- 24. Stapedius is supplied by Facial nerve.
- 25. Stapedial reflex is a protective reflex against loud sound.
- 26. Lateral wall of middle ear formed by tympanic membrane
- 27. The length of Eustachian tube is 36 mm
- 28. Eustachian tube opens into middle ear cavity at anterior wall.
- 29. Inner ear is present in petrous part of temporal bone.
- 30. Inner ear bony labyrinth is called cancellous bone.
- 31. Cochlear aqueduct connects scala tympani with subarachnoid space.
- 32. Infection of CNS spread in inner ear through cochlear aqueduct.
- 33. Crus commune is union of non ampullate ends of anterior and posterior semicircular canals.
- 34. Stapes footplate covers oval window.
- 35. Organ of corti is situated in scala media.
- 36. Organ of corti is situated in the basilar membrane.
- 37. Endolymphatic duct is an closed sac.
- 38. Endolymph is seen in scala media.

- 39. Endolymph in inner ear is secreted by striae vascularis.
- 40. Labyrinthine artery is a branch of Anteroinferior cerebellar artery.
- 41. Tympanic membrane represents all the 3 components of the embryonic disc.
- 42. Pinna develops from 1 st and 2nd pharyngeal arches.
- 43. Vertical crest at the internal auditory canal is Bill's bar.
- 44. Eustachian tube develops from 1st pharyngeal pouch.
- 45. Ear ossicles attain adult size before birth.
- 46. True regarding "Preauricular sinus" is improper fusion of auricular tubercles.
- 47. Nerve of the pterygoid canal is also known as Vidian nerve

Physiology of Hearing and Hearing loss

- 1. Otoacoustic emissions arise from the outer hair cells.
- 2. Stapedial reflex is mediated by VII and VIII nerves.
- 3. The cough response caused while cleaning the ear canal is mediated by stimulation of the 10th Cranial nerve.
- 4. Perilymph contains increased Na+.
- 5. Endolymph in the inner ear is secreted by stria vascularis.
- 6. Higher auditory center determine sound localization.
- 7. Movement of stapes causes vibration in the Scala vestibule.
- 8. Bones of middle ear are responsible for reduction of impedance to sound transmission.
- 9. Semicircular canals are stimulated by rotation.
- 10. Horizontal semicircular canal respond to rotational acceleration.
- 11. Primary receptor cells of hearing are the inner hair cells.
- 12. Sound is painful at the level of 100-120dB.
- 13. Middle ear is sensitive to 500-3500 Hz.
- 14. AGer rupture of tympanic membrane, the hearing loss is 10-40 dB.
- 15. Ossicular disruption with intact tympanic membrane causes maximum hearing loss.
- 16. Commonest cause of hearing loss in children is chronic secretory otitis media.
- 17. Commonest cause of hearing loss in children is otitis media with effusion.
- 18. Commonest cause of deafness in adult is Wax.
- 19. Hyperacusis is defined as normal sounds heard as loud and painful.
- 20. Conductive deafness occurs in travelling in aeroplane or ship.
- 21. Otitic barotrauma results due to descent in air.
- 22. Virus causing acute onset sensorineural deafness is Rubella Measles.
- 23. Sensorineural deafness is seen in Alport's syndrome, Pend red's syndrome, Treacher-Collins syndrome, Michel's aplasia etc.

Tests For Hearing

- 1. Gelle's test is done in otosclerosis.
- 2. Stenger's test is used to detect malingering.
- 3. Rinne's test is negative in tympanosclerosis.
- 4. Negative Rinne's test is seen in CSOM.
- 5. Rinne's test is negative if minimum deafness is 15-20 dB.

- 6. Positive Rinne test is seen in presbycusis.
- 7. Rinne's test is positive in normal individual.
- 8. Weber test is best elicited by placing the tuning fork on the forehead and asking him to report in which ear he hears it better.
- 9. In the right middle ear pathology, Weber's test will be lateralized to right side.
- 10. In Weber's test in conductive deafness, sound louder in diseased ear.
- 11. In pure tone audiogram the symbol X is used to mark air conduction in leG ear.
- 12. The "0" sign in a pure tone audiogram indicates air conduction of right ear.
- 13. Tone decay test is done for neural deafness.
- 14. Impedance audiometry is for pathology of middle ear.
- 15. Impedance audiometry is done using frequency probe of 220 Hz.
- 16. Flat tympanogram is seen in ASOM.
- 17. B-type tympanogram is seen in Serous otitis media.
- 18. Flat and dome-shaped graph in tympanogram is found in middle ear fluid.
- 19. In osteogenesis imperfecta, the tympanogram is low-compliance.
- 20. High frequency audiometry is used in ototoxicity.
- 21. Transient Otoacoustic emissions is the best test for screening of the auditory function of neonates.
- 22. Brainstem evoked response audiometry (BERA) is the investigation of choice in assessing hearing loss in neonates.
- 23. In infant most sensitive audiometric screening is BERA.
- 24. To distinguish between cochlear and post cochlear damage, Brainstem evoked response audiometry test is done.
- 25. Test of detecting damage to cochlea is ABC test.
- 26. Threshold for bone conduction is normal and that for air conduction is increased in disease of middle ear.
- 27. Stapedial reflex is mediated by VII and VIII nerves.
- 28. Vestibular evoked myogenic potential detects lesion of inferior vestibular nerve.
- 29. In electrocochleography, outer hair cells are mainly responsible for cochlear microphonics and summation potential.

Diseases of the Ear

- 1. Narrowest part of middle ear is mesotympanum.
- 2. Sensory nerve supply of middle ear cavity is provided by Glossopharyngeal Nerve.
- 3. Tegmen separates middle ear from the middle cranial fossa containing temporal lobe of brain by the roof of middle ear.
- 4. Floor of middle ear cavity is in relation with the jugular bulb.
- 5. External otitis is also known as telephonists ear.
- 6. Causes of Otomycosis is Candida.
- 7. Fungus causing otomycosis most commonly is Aspergillus fumigates.
- 8. Hemorrhagic external otitis media is caused by Influenza.
- 9. Malignant otitis externa is caused by P. Aeruginosa.
- 10. Malignant otitis externa is common in diabetics and old age.
- 11. Malignant otitis externa is Pseudomonas infection in diabetic patient.
- 12. Facial nerve palsy is seen in malignant otitis externa.
- 13. Keratosis obturans is desquamated epithelial cells + Cholesterol.
- 14. Chondritis of aural cartilage is most commonly due to Pseudomonas.
- 15. Cauliflower ear is Perichondritis in Boxers.

16. Direction of water jet while doing syringing of ear should be posterior.

Diseases of Middle Ear

- 1. Commonest cause of acute otitis media in children is S-pneumoniae.
- 2. Commonest causative organism for ASOM in 2 years child is Pneumococcus.
- 3. ASOM is most frequently resolves without sequelae.
- 4. Cart Wheel sign is seen in ASOM.
- 5. Cause of U/L secretory otitis media in an adult is nasopharyngeal carcinoma.
- 6. Acute non suppurative otitis media in adults-is due to malignancy.
- 7. Glue ear is painless.
- 8. Secretory otitis media is diagnosed by impedance audiometry.
- 9. Bluish tympanic membrane is seen in glue ear.
- 10. Treatment of choice for glue ear is myringotomy with ventilation tube insertion.
- 11. Tympanostomy tubes are usually required for treatment in serous otitis media.
- 12. Cholesteatoma is commonly caused by attico-antral perforation.
- 13. Most accepted theory for the formation of cholesteatoma is retraction pocket.
- 14. Treatment of choice in central safe perforation is myringoplasty.
- 15. The treatment of choice for atticoantral variety. of chronic suppurative otitis media is Modified Radical mastoidectomy.
- 16. Ossicle most commonly involved in CSOM is the long process of incus.
- 17. The most common complication of chronic suppurative otitis media is Mastoiditis.
- 18. Most common complication of acute otitis media in children is perforation.
- 19. Most common extra-cranial complication of ASOM is sub periosteal abscess.
- 20. Mastoid reservoir phenomenon is positive in coalescent mastoiditis.
- 21. Essential radiological feature of acute mastoiditis is clouding of air cells of mastoid.
- 22. Bezold abscesses is located in sternomastoid muscle.
- 23. Treatment of choice for CSOM with vertigo and facial nerve palsy is immediate mastoid exploration.
- 24. Most potential route for transmission of meningitis from CNS to inner ear is cochlear aqueduct.
- 25. Light house sign is seen in ASOM.
- 26. In ASOM, myringotomy is done in postero-inferior quadrant.
- 27. Ideal site for myringotomy and grommet insertion is the antero-inferior quadrant.
- 28. Myringoplasty is plastic repair of tympanic membrane.
- 29. Myringoplasty is done using temporalis fascia, perichondrium etc.
- 30. Columella effect is seen in tympanoplasty type 3.
- 31. Type III Tympanoplasty is most common type of tympanoplasty.
- 32. For ear surgery, 250mm which focal length in the objective piece of microscope is commonly used.
- 33. Schwartz operation is also called as cortical mastoidectomy.
- 34. Simple mastoidectomy is done in coalescent mastoiditis.
- 35. Commonest congenial malformation of temporal bone dehiscent fallopian canal.

Otosclerosis

- 1. Otospongiosis is inherited as an autosomal dominant disease (50% of cases).
- 2 . In otosclerosis, deafness occurs in 20 30 yrs but less in before 10 yrs and 40 years.
- 3. Common age for otosclerosis is 20 30 yrs.
- 4. Commonest site of otosclerosis is oval window.
- 5. Most common site for the initiation of otosclerosis is fistula ante fenestrum.
- 6. Otospongiosis causes B/L conductive deafness.
- 7. Paracusis willisii is a feature of otosclerosis.
- 8. In otosclerosis tinnitus is due to cochlear otosclerosis.
- 9. In majority of the cases with otosclerosis the tympanic membrane is normal.
- 10. Schwartz sign seen in otosclerosis.
- 11. Carhart's notch in audiometry is seen in otosclerosis.
- 12. Acoustic dip occurs at 4000 Hz.
- 13. Medication which may prevent rapid progress of cochlear otosclerosis is fluorides.
- 14. In otosclerosis during stapes surgery prosthesis used is Teflon piston.
- 15. A pure tone audiogram with a dip at 2000 Hz in bone conduction is characteristic of otosclerosis.

Tumours of Cerebellopontine Angle

- 1. Most common cerebellopontine angle tumour is acoustic neuroma.
- 2. Acoustic neuroma commonly arise from Inferior vestibular nerve.
- 3. In acoustic neuroma cranial nerve to be involved earliest is the 5th nerve.
- 4. The earliest symptom of acoustic nerve tumor is sensorineural hearing Loss.
- 5. Earliest sign seen in Acoustic neuroma is reduced corneal reflex.
- 6. Acoustic neuroma causes retrocochlear deafness.
- 7. Heitzelberger's sign is seen in vestibular schwannoma.
- 8. Earliest ocular finding in acoustic neuroma is the loss of corneal sensation.
- 9. The investigation of choice for acoustic neuroma of gadolinium enhanced MRI.

Glomus Tumour

- 1. The usual location of Glomus jugular tumor is hypotympanum.
- 2. Earliest symptom of glomus tumor is pulsatile tinnitus.
- 3. Pulsatile tinnitus in ear is due to glomus jugulare tumor.
- 4. Brown sign is seen in glomus tumor.
- 5. Phelps' sign is seen in glomus jugulare.
- 6. Glomus tumor bleeds on touch.
- 7. Most common Malignant tumour of middle ear is squamous cell carcinoma.
- 8. Treatment of middle ear malignancy includes excision of petrous part of temporal bone.

Facial nerve and its Disorders

- 1. First branch of the facial nerve is Greater petrosal nerve.
- 2. Lacrimation is affected when facial nerve injury is at GENICULATE ganglion.
- 3. Dryness of eye is caused by injury to facial nerve at geniculate ganglion.
- 4. Hyperacusis in Bell's palsy is due to the paralysis of the stapedius.

- 5. Intra temporal lesion of chorda tympani nerve results in loss of secretomotor fibres to the submandibular salivary gland.
- 6. Facial nerve palsy at styloid face men canal can cause loss of corneal reflex at side of lesion.
- 7. Right upper motor neuron lesion of facial nerve causes paralysis of lower facial muscles leG side.
- 8. Crocodile tears is due to improper regeneration of facial nerve.
- 9. Latrogenic traumatic facial nerve palsy is most commonly caused during mastoidectomy.
- 10. Transverse fractures of the petrous bone will cause facial nerve palsy.
- 11. Facial nerve palsy is seen in malignant otitis externa.
- 12. Horizontal part of the facial nerve is commonly exposed through natural dehiscence in the fallopian canal.
- 13. Most common cause of facial palsy is Bells palsy.
- 14. Most common cause of lower motor neuron facial palsy is Bell's palsy.
- 15. Bell's Palsy is the idiopathic ipsilateral paralysis of the facial nerve.
- 16. In Herpes zoster, there are vesicles over external acoustic meatus with ipsilateral facial palsy of LMN type.
- 17. Ramsay hunt syndrome is caused by H. Zoster.

Meniere's Disease

- 1. Meniere's disease is characterized by vertigo, tinnitus hearing loss and headache.
- 2. The dilatation of Endolymphatic sac is seen in Meniere's disease, Acoustic neuroma.
- 3. Meniere's disease is endolymphatic hydrops.
- 4. Endolymphatic hydrops occurs between 3rd and 4th decades.
- 5. Glycerol test is done in Meniere's disease.
- 6. Recruitment phenomenon is seen in Meniere's disease.
- 7. Vasodilators in Meniere's disease are useful because they increase endolymph reabsorption.
- 8. Vasodilators of internal ear are Nicotinic acid, Histamine.
- 9. Endolymphatic decompression is done in Meniere's disease.
- 10. Destructive procedure for Meniere's disease is Labyrinthectomy.

Rehabilitative Methods

- 1. In cochlear implants electrodes are most commonly placed at cochlea.
- 2. Cochlear implantation is done in scala tympani.
- 3. Absolute indication for cochlear implantation is B/L Severe to profound sensorineural hearing loss.

Anatomy & Physiology of Nose

- 1. Frontonasal duct opens into middle meatus.
- 2. Frontal sinus drain into middle meatus.
- 3. Paranasal sinus opening in middle meatus are maxillary, anterior ethmoid and frontal sinuses.
- 4. The maxillary sinus opens into middle meatus at the level of hiatus semilunaris.
- 5. Hiatus semilunaris is present in middle meatus.
- 6. Bulla ethmoidalis is seen in middle meatus.
- 7. Sphenoidal sinus opens into sphenoethmoidal recess
- 8. Opening of posterior ethmoid sinus is in superior meatus.
- 9. Nasolacrimal duct opens into inferior meatus.
- 10. Inferior turbinate is a separate bone.
- 11. Anterior ethmoid cells (Agger nasi) is also known as fourth turbinat.

- 12. Turbinate that articulates with ethmoid is inferior turbinate.
- 13. Direction of nasolacrimal duct is downward, backward and laterally.
- 14. Nasal valve is formed by lower end of upper lateral cartilage.
- 15. Ostiomeatal complex connects nasal cavity with maxillary sinus.
- 16. Nasal mucosa is supplied mainly by the external carotid artery.
- 17. During inspiration the main current of airflow in a normal nasal cavity is through the middle part of the cavity in the middle meatus in a parabolic curve.
- 18. Function of mucociliary action of upper respiratory tract is to trap the pathogenic organisms in inspired air.
- 19. Ciliary movement rate of nasal mucosa is 5-10 mm/min.
- 20. Parosmia is perversion of smell sensation.
- 21. Nasolacrimal duct drains into inferior meatus.
- 22. Nasal cycle is the cyclical alternate nasal blockage occurring every 6-8 hours.

Diseases of Nose and Septum

- 1. Rhinophyma is not premalignant.
- 2. Nasolabial cysts are B/L, have strong female predilection and present in adults.
- 3. Depressed bridge of nose may be due to Leprosy, syphilis, thalassemia.
- 4. A crooked nose is due to deviated dorsum and septum.
- 5. Thudiculum's nasal speculum is used to visualize anterior nasal cavity.
- 6. Inferior meatus is not visualized on posterior rhinoscopy.
- 7. Submucous resection operation is indicated in septal deviation preferably done aGer 16 years of age.
- 8. Alternative for SMR is septoplasty.
- 9. Killian's incision is used for SMR of nasal septum.
- 10. SMR is contraindicated below 12 years of age.
- 11. Mitomycin is used to prevent synechiae formation aGer nasal surgery.
- 12. Septal hematoma can lead to saddle-nose deformity.
- 13. Bony septal perforation occurs in syphilis.
- 14. Anterior ethmoidal neuralgia is due to middle turbinate pressing on the nasal septum.
- 15. Cottle's test is used to test the patency of the nares in DNS.
- 16. Rhinophyma is associated with hypertrophy of the sebaceous glands.

Epistaxis

- 1. Woodruff's plexus is seen at the posterior part of inferior turbinate.
- 2. Little's area is situated in nasal cavity in anteroinferior quadrant.
- 3. Most common cause for nose bleeding is trauma to Little's area.
- 4. In a 5-year-old child, most common cause of unilateral epistaxis is foreign body.
- 5. The most common cause in recurrent epistaxis in a 15 year old female is hematopoietic disorder.
- 6. Epistaxis in elderly person is common in hypertension.
- 7. In case of uncontrolled epistaxis, ligation of internal maxillary artery is to be done in the Pterygopalatine fossa.
- 8. Treatment of choice in recurrent epistaxis in a patient with hereditary haemorrhagic telangiectasia is septal dermatoplasty.
- 9. Posterior epistaxis is commonly seen in hypertension.
- 10. Kiesselbach's plexus is situated on the medial wall of the nasal cavity.

- 11. Posterior epistaxis occurs from Woodruffs plexus.
- 12. Sphenopalatine artery is known as artery of epistaxis.

Granulomatous Disease of the Nose

- 1. Rhinosporidiosis is caused by Mesomycetazoea Rhinosporidium Seeberi.
- 2. Ideal treatment of rhinosporidiosis is excision with cautery at base.
- 3. Rhinoscleromatis is caused by Klebsiella.
- 4. Mikulicz cells and Russel bodies are characteristic of Rhinoscleroma.
- 5. Atrophic dry nasal mucosa and extensive encrustations with woody hard external nose is suggestive of Rhinoscleroma.
- 6. Apple-jelly nodules on the nasal septum are found in case of Lupus vulgaris.
- 7. Secondary syphilis is the common association.
- 8. Killian term is used for Antr choanal polyp.
- 9. The most appropriate management for antr choanal polyp in children is FESS.
- 10. Ethmoidal polyp is associated with bronchial asthma.
- 11. "Bernoulli's theorem" explains nasal polyp.
- 12. Most common complication of Caldwell-Luc operation is infraorbital nerve palsy.
- 13. Most common cause of U/L mucopurulent rhinorrhea in a child is Foreign body.
- 14. Rhinolith is the deposition of calcium around foreign body in nose.
- 15. Maggots in the nose are best treated by Chloroform diluted with water.
- 16. Frish bacillus causes rhinoscleroma.
- 17. A Rapidly destructive infection of nose and paranasal sinuses in diabetics is mucormycosis.
- 18. Multiple nasal polyp in children should guide the clinician to search for underlying mucoviscidosis.

Diseases of PNS

- 1. Ethmoid sinus is most commonly affected in a child.
- 2. In acute sinusitis, the sinus most oGen involved in children is the ethmoid sinus.
- 3. Bilateral proptosis and bilateral 6th nerve palsy in seen is cavernous sinus thrombosis.
- 4. Aspergillus sp is the most common etiological agent in paranasal sinus fungal sinusitis.
- 5. Surgery is required for treatment for fungal sinusitis.
- 6. Periodicity is a characteristic feature in frontal sinus infection.
- 7. Sphenoid sinusitis pain is referred most commonly to occiput.
- 8. Best view for evaluating sphenoid sinus is the lateral view.
- 9. Best view for frontal sinus is the Caldwell view.
- 10. For viewing superior orbital fissure-best view is the Caldwell view.
- ${\tt 11.}$ Angular vein infection commonly causes thrombosis of cavernous sinus.
- 12. Pathognomic feature of Maxillary sinusitis is mucopus in the middle meatus.
- 13. The best surgical treatment for chronic maxillary sinusitis is functional endoscopic sinus surgery.
- 14. Frontal mucocele presents as swelling above medial canthus, below the floor of frontal sinus.
- 15. Mucocele is commonly seen in frontal sinus.
- 16. Most common site for osteoma is the frontal sinus.
- 17. First paranasal sinus to develop at birth is maxillary sinus.
- 18. Antrum of Highmore is another name for maxillary sinus.

19. Rarest sinus to get infected is sphenoid sinus.

Tumors of PNS

- 1. In tumors of PNS and Nose, Squamous cell Ca is the MC type
- 2. Most common malignancy in maxillary antrum is Squamous cell Ca

Anatomy of Pharynx

- 1. The lymphatic drainage of pyriform fossa is to the upper deep cervical nodes.
- 2. Killian's dehiscence is seen in cricopharynx.
- 3. Indication for Adenoidectomy in children include middle ear infection with deafness.
- 4. The most common organism causing acute tonsillitis is hemolytic streptococci.
- 5. Tonsillectomy following peritonsillar abscess is done aGer 6-8 weeks.
- 6. Most common postoperative complication of tonsillectomy is hemorrhage.
- 7. Secondary hemorrhage aGer tonsillectomy develops within 6 days.

Embryological Development

- 1. Laryngeal cartilage forming complete circle is the Cricoid cartilage.
- 2. Narrowest part of infantile larynx is Subglottic.
- 3. Abductor of vocal cord is posterior cricoarytenoid.
- 4. Sensory nerve supply of larynx below the level of vocal cord is recurrent laryngeal nerve.
- 5. The water cane in the larynx (saccules) are present in laryngeal ventricles.
- 6. Vocal cord is lined by Stratified squamous epithelium.
- 7. Inlet of larynx is formed by aryepiglottic fold.
- 8. A neonate while suckling milk can respire without difficulty due to high larynx.
- 9. Laryngocele arises from saccule of the ventricle.
- 10. External laryngocele arises as herniation of laryngeal mucosa through the thyrohyoid membrane.
- 11. Most common congenital anomaly of larynx is laryngomalacia.
- 12. Laryngomalacia is the common cause of stridor in newborn.
- 13. Most common mode of treatment for laryngomalacia is reassurance.
- 14. Most common cause of stridor in children is foreign body in larynx.
- 15. Stridor in adults is most commonly caused by malignancy.
- 16. The most common cause of laryngeal stridor in a 60-year- old male is thyroid carcinoma.
- 17. Laryngofissure is opening the larynx in midline.
- 18. Anterior commissure is difficult to visualize or examine on indirect laryngoscopy.
- 19. Microlaryngoscopy was started by Kleinsasser.
- 20. The procedure that should precede microlaryngoscopy is laryngeo endoscopy.
- 21. Laryngeal mirror is warmed before use by placing glass surface on flame
- 22. Abductor of vocal cord is posterior cricoarytenoid.
- 23. Cricothyroid is the only intrinsic muscle of larynx that lies outside the laryngeal framework.
- 24. Palpatory thud, audible slap is seen in tracheal foreign body.
- 25. Epiglottitis in a 2-year-old child occurs most commonly due to infection with Haemophilus influenza.
- 26. Thumb sign in lateral X-ray of neck seen in epiglottitis.
- 27. In acute epiglottis, common cause of death is respiratory obstruction.
- 28. The antibiotic of choice in acute epiglottitis pending culture sensitivity report is Ampicillin.

- 29. In Pachydermia laryngitis, the most common site of involvement of arytenoids cartilage.
- 30. Steeple sign is seen in croup.
- 31. Tubercular laryngitis primarily affects posterior commissure of larynx.
- 32. Reinke's edema is seen in edges of vocal cords.
- 33. Reinke's layer is seen in vocal cord.
- 34. Pharyngeal Pseudo sulcus is seen secondary to laryngopharyngeal reflux.
- 35. In dysphonia plica ventricularis, sound is produced by false vocal cords.
- 36. In a patient with hypertrophied adenoids, the voice abnormality that is seen is rhinolalia clausa.
- 37. Androphobia can be corrected by doing Type 4 thyroplasty.
- 38. Key nob appearance is seen in phonasthenia.
- 39. Most common location of vocal nodule is at the junction of Anterior 1/3 and posterior 2/3 junction.
- 40. Vocal nodule is also known as screamer's node.
- 41. According to European Laryngeal Society, subligamentous cordectomy is classified as Type II.
- 42. Change in pitch of sound is produced by which muscle cricothyroid.

Vocal Cords Paralysis

- 1. Cricothyroid muscle is supplied by superior laryngeal nerve.
- 2. Position of vocal cord in cadaver is intermediate.
- 3. The most common cause of vocal cord palsy is idiopathic.
- 4. LeG sided vocal cord palsy is commonly due to leG hilar bronchial carcinoma.
- 5. In complete bilateral palsy of recurrent laryngeal nerves, there is preservation of speech with severe stridor and dyspnea.
- 6. The voice in a patient with bilateral abductor paralysis of larynx is normal or good voice.
- 7. Injury to superior laryngeal nerve causes loss of timbre of voice.
- 8. Paralysis of recurrent laryngeal nerve is common in leG side.
- 9. Partial recurrent laryngeal nerve palsy produces vocal cord in paramedian position.
- 10. Type I thyroplasty is for vocal cord medialization.
- 11. In thyroplasty type 2, vocal cord is lateralized.
- 12. Keratosis of larynx is a precancerous lesion.
- 13. Multiple papillomatosis is premalignant.
- 14. The most common and earliest manifestation of carcinoma of the glottis is hoarseness.
- 15. Lymph mode metastasis in neck is almost never seen with carcinoma vocal cords.
- 16. Carcinoma of epiglottis commonly presents with neck nodes.
- 17. Infraglottic carcinoma larynx commonly spreads to mediastinal nodes.
- 18. The treatment of choice for stage I cancer larynx is radiotherapy.
- 19. For carcinoma larynx stage III with no cartilage involvement treatment of choice is CTRT.
- 20. Radiotherapy is the TOC for nasopharyngeal Ca T3 NO.
- 21. The preferred treatment of verrucous carcinoma of the larynx is endoscopic removal.
- 22. In case of CA larynx in arytenoid cartilage involvement, investigation of choice is MRI.
- 23. Juvenile papillomatoses is caused by HPV.
- 24. Maintenance of airway during laryngectomy in a patient with carcinoma of larynx is best done by tracheostomy.

High Yield Notes

- 1. Pinna develops from '6' Hillocks of his, originating from the 1st and 2nd branchial arches.
- 2. Pre auricular sinus develops due to incomplete fusion of the 1st and 2nd hillock of his.
- 3. Bat car is characterized by excessive conchal cartilage with poorly/non-developed anti helix.
- 4. Cosmetic correction of pinna is done at 6 years of age.
- 5. Mastoid process develops aGer 1st year of life.
- 6. Malleus and incus develops from the 1st branchial arch while stapes develops from the 2nd branchial arch and the otic capsule.
- 7. Cymba concha is the soG tissue anatomical landmark for mastoid antrum.
- 8. Mac Ewan's triangle is the bony landmark for the mastoid antrum.
- 9. V,VIII,IX and X cranial nerve and cervical plexus supply the auricle.
- 10. Structure related to the anterior wall of the middle ear are Tensor tympani, processus cochleariformis, Eustachian tube and Internal carotid artery.
- 11. Thickness of the mastoid antrum at birth is 2 mm.
- 12. Korner's septum is the persistent petrosquamosal suture.
- 13. Eustachian tube is opened by 'Tensor palatine.
- 14. In the spherical recess of the inner ear rests the macula of saccule, elliptical recess for the macula of the utricle, and vestibular aqueduct for the endolymphatic sac.
- 15. Cochlear aqueduct communicates with the C.S.F. fluid.
- 16. Basal cochlear term perceive high frequency sounds while the apical turn perceives the low frequency sound.
- 17. Labyrinthine artery which supplies the inner ear is a branch of anterior-inferior cerebellar artery.
- 18. Bill's bar of the Internal auditory meatus separates the Facial nerve from the Superior vestibular nerve.
- 19. Linear acceleration and deceleration is perceived by the utricle and saccule while angular acceleration is perceived by the semicircular canals.
- 20. Otosclerosis is an autosomal-dominant disease condition seen more commonly in females.
- 21. Most common site of otosclerosis focus- anterior to the oval window.
- 22. A normal tympanic membrane is seen otoscopically in cases of otosclerosis.
- 23. Cookie- bite audiogram is seen in cases of cochlear otosclerosis.
- 24. Sodium fluoride therapy is given for cases of active otosclerosis.
- 25. Vestibular schwannoma is the commonest cerebellopontine angle tumour.
- 26. Gold- standard for imaging of vestibular schwannoma is MRI.
- 27. Glomus tumours are slow-growing tumours, found more commonly in females. Malignant transformation is rare
- 28. Glomus tumour is seen as a pulsatile mass under the microscope
- 29. Phelps' sign is pathognomic of glomus jugulare
- 30. Facial nerve is secretomotor to lacrimal gland submandibular and sublingual salivary gland.
- 31. Chorda tympani carries secretomotor fibres to the submandibular and sublingual gland.
- 32. Electroneurography (ENOG) is the best guideline for facial nerve decompression.
- 33. EMG alerts the physician to sub clinical recovery of the facial nerve.
- 34. 80% of the temporal bone fracture are longitudinal facial nerve is involved only in 10% of the cases.
- 35. Bell's palsy is acute idiopathic lower motor neurone type facial palsy. Can also have associated cranial polyneuritis.
- 36. Meniere's disease is autosomal dominant disease condition seen more in females.

- 37. Meniere's disease is characterized by cochlear hydrops in all and saccular hydrops in most of the cases.
- 38. Hypothyroidism, Hyperlipoproteinemia, Hypo/Hyper glycaemia are the various metabolic disorder associated with Meniere's disease.
- 39. Low frequency sounds are affected first in Meniere's disease.
- 40. ECOG- is the most sensitive and diagnostic test for Meniere's disease.
- 41. Fick and Cody tack procedure is a type of sacculotomy performed in Meniere's disease.
- 42. Acute furunculosis in severe cases is characterized by retroanticular suleus obliteration and forward displacement of pinna.
- 43. Myringitis bullosa is caused by virus in majority of the cases.
- 44. Ramsay Hunt syndrome is characterized by vesicles over the pinna and facial nerve palsy due to involvement of its geniculate ganglion
- 45. Malignant otitis externa is treated by ciprofloxacin given for a period of 3 months
- 46. 20% of the perforations in ASOM heal in a months' time.
- 47. Acute mastoiditis is characterized by tenderness over the mastoid antrum, with displacement of the pinna in forward and downward direction.
- 48. Bezold's abscess is found in relations to the sheath of sternocleidomastoid.
- 49. Citelli's abscess is found in relation to the posterior belly of diagnostic
- 50. Luc's abscess is found in relation to the external and auditory canal.
- 51. Acute necrotizing otitis media is seen in seen in some children who have suffered from measles. Scarlet fever, pneumonia or influenza.
- 52. Congenital cholesteatoma originates from the embryonal inclusion of squamous epithelium. It is found behind an intact tympanic membrane with no previous history Otitis media.
- 53. Commonest site of origin of cholesteatoma is the posterior epitympanum, or the Prussak's space.
- 54. Griesinger's sign in lateral sinus Thrombophlebilitis is pitting oedema over the occipital region. it occurs due to mastoid emissary vein thrombosis.
- 55. C.S.F. picture of patient suffering from meningitis show a low CT and glucose level with raised protein levels.
- 56. Otitis hydrocephalus seen in children occurs weeks aGer ASOM or months aGer CSOM
- 57. The dome of the lateral semicircular canal is the commonest site of labyrinthine fistula.
- 58. Gradenigo's syndrome seen in Petrositis occurs due to involvement of the V and VI cranial nerve
- 59. Myringotomy in O.M.E (Otitis media with Effusion) is performed in the antero-inferior quadrant.
- 60. Tubercular otitis media is characterized by painless otorrhea. Sensorineural hearing loss and facial palsy.
- 61. Muscles attached to the oblique line of the thyroid cartilage are thyrohyoid, sternothyroid and inferior constrictor
- 62. In thyroidectomy, the nerve more commonly injured is the external laryngeal nerve.
- 63. Structures passing through the sinus of Morgagni are cartilaginous part of the eustachian tube, Tensor palate, Levator palati and palatine branch of the ascending pharyngeal artery.
- 64. Acute epiglottitis is caused by H. Influenza type B.
- 65. Contact ulcers also known as kissing ulcers show no epithelial defect unlike its name.
- 66. Tubercular laryngitis is a painful condition and is characterized by mouse-nibbled appearance of the laryngeal muscular
- 67. Dysphonia plica ventricularis is characterized by low-unpleasant voice. The voice production occurs the level of false cords.
- 68. Phonasthenia is weakness of voice due to fatigue of phonatory muscles. Key- hole appearance of the glottis is produced due to weakness of thyroarytenoid and the interarytenoid.
- 69. Early vocal nodules are treated by voice rest followed by speech therapy. Late nodules are treated by micro

laryngeal surgery followed by speech therapy.

- 70. Juvenile laryngeal papillomatosis is caused by HPV strains 6 & 11.
- 71. Tonsils are supplied by facial artery, internal maxillary, lingual artery and the Ascending pharyngeal artery
- 72. Interval tonsillectomy following recurrent quinsy is performed at 6 wks
- 73. Nodes of Rouviere are main and constant lateral group of retropharyngeal lymph mode
- 74. Chronic retropharyngeal abscess occur due to T.B of the cervical spine or suppuration of tubercular retropharyngeal lymph node.
- 75. Vincenti's angina is caused a spirochacte Borelli vincenti and anaerobe- bacillus fusiformis
- 76. Vicenti's angina is characterized by necrotizing gingivitis, tender cervical lymphadenopathy.
- 77. Keratosis pharyngis is a benign condition and is characterized by horny excrescences on the tonsillar surface pharyngeal wall lingual tonsil, Reassurance is the treatment modality.
- 78. Adenoids are clinically seen by the 4^{th} month and are visible radiographically in children more than 6 month of age
- 79. Secondary haemorrhage following tonsillectomy is treated with antibiotics
- 80. (L) side cord palsy is more common than the (R) side due to the longer course traversed by the (L) vagus nerve. While in thyroidectomy (R) sided palsy is more common than the (L).
- 81. Patient with B/L adductor paralysis have a good voice with stridor.
- 82. B/L adductor paralysis manifests with aphonia, inability to cough and repeated attacks of bronchopneumonia.
- 83. Angiofibroma arises from the superior margin of the sphenopalatine foramen.
- 84. Angiofibroma is chiefly supplied by the sphenopalatine branch of internal maxillary artery.
- 85. Commonest site of origin of nasopharyngeal carcinoma is the fossa of Rosenmuller.
- 86. Nasopharyngeal carcinoma presents mainly with painless cervical lymphadenopathy.
- 87. IgA/VCA (viral capsid antigen) is used for serological screening of patients with nasopharyngeal carcinoma.
- 88. Post- cricoid carcinomas are treated with total laryngectomy with total pharyngectomy.
- 89. Laryngeal cysts are most commonly seen in the area of vocal cords.
- 90. Commonest benign epithelial tumour of larynx is Papilloma.
- 91. Carcinoma of the larynx most commonly affect the glottis area.
- 92. Verrucous carcinoma of the larynx is treated by partial total/laryngectomy
- 93. Dentigerous (Follicular cyst) cyst develop from the crown of the permanent tooth
- 94. Lymphoma or non healing midline granuloma is a progressive destructive the nose and midfacial region.
- 95. Commonest benign tumour of the Sinonasal area is OSTEOMA.
- 96. Tracheostomy reduces the dead space by 30-50%.
- 97. Apnoea following tracheostomy is treated using Carbogen (5% Co₂, 95% O₂)
- 98. Zenker's originates from Kilian's dehiscence between thyreopharyngeus and cricopharyngeus
- 99. Boyce sign is gurgling sensation on compression of the pharyngeal pouch
- 100. Dohlman's operation is Endoscopic diathermy of the diverticula- esophageal septum of the pharyngeal pouch
- 101. Sis trunk's operation is performed for removal of the thyroglossal cyst
- 102. Most common carcinoma arising in the thyroglossal cyst is the papillary adenocarcinoma
- 103. Branchial cyst are positioned deep to the sternocleidomastoid at the junction of upper 1/3rd with lower 2nd
- 104. Bronchial sinus is present since birth but cysts present in the third decade
- 105. Ludwig's angina is rapidly spreading cellulitis of the floor of the mouth and submandibular space secondary to infection of teeth & tonsils.

- 106. Neck incision used for irradiated neck are McFee's incision
- 107. One side radical neck dissection causes a threefold increases in the intracranial pressure while B/L RND causes a fivefold increase.
- 108. Plummer-Vinson syndrome is characterized by cervical dysphagia anemia and upper oesophageal webs.
- 109. Chances of oesophageal perforation following ingestion of alkaline substance is much higher than acidic substances
- 110. Nasal value area is the narrowest part of the nasal cavity.
- 111. Nasolacrimal duct opens just anterior to the highest point of the inferior meatus.
- 112. Anterior and posterior fontanelle are membranous areas between the interior turbinate and the uncinate process
- 113. Accessory ostia are mostly found in the posterior fontanelle
- 114. Frontal sinus develops in the fourth year of life and is radiologically visible in children more than 6 years of age.
- 115. Maxillary sinus is present sinus birth and is radiographically visible by 4-5 months of age.
- 116. Frontal sinusitis causes office headache while maxillary sinusitis produces evening headache.
- 117. Atrophic rhinitis starts at puberty and stops aGer menopause.
- 118. Lautenslager's operation for atrophic rhinitis aims at mediatisation of the lateral nasal wall.
- 119. Rhinitis caseosa or nasal cholesteatoma is characterized by accumulation of offensive chessy material resembling cholesteatoma
- 120. Pott's puffy tumour is subperiosteal abscess subsequent to frontal sinusitis.
- 121. Primary syphilis is characterized by clearance while secondary syphilis is characterized by roseolar/papular rashes.
- 122. Tuberculosis of the nose commonly affects the cartilaginous portion of nasal septum and the anterior end of the inferior turbinate.
- 123. Lupus vulgaris affect the mucocutaneous junction of the nasal septum
- 124. Hebra nose/woody nose is seen in association with the granulomatosis stage of Rhinoscleromatis.
- 125. Lepromatous leprosy affects the nose more than the tuberculoid type.
- 126. Aspergillosis is the commonest fungal infection of the nose and Para nasal sinuses
- 127. Mucormycosis presents with black necrosis mass in the entire nasal cavity
- 128. Small to medium sized septal perforations can be treated surgically while large perforations are sealed using obturators
- 129. Ethmoidal polyp regress in 50% of cases with steroid drops / spray.
- 130. Antr choanal polyps are to be treated by surgical removal.
- 132. C.S.F rhinorrhea is first treated by medical management for 10-14 days
- 133. Blood vessels contributing to little's area are sphenopalatine, anterior ethmoid greater palatine and superior labial artery.
- 134. Woodruff's plexus is found in the lateral nasal wall posterior to the inferior turbinate.
- 135. Most common fracture site of the mandible is the subcondylar region.
- 136. Zygomatic fractures are known as tripod fracture.
- 137. Tear drop sign is seen in the fracture of the orbital floor on the C.T. scan.
- 138. Poor speech discrimination score with a positive tone decay is a feature of Retrocochlear hearing loss.
- 139. Positive recruitment is seen in cochlear hearing loss