- tonsils are located between 2 arches palatoglossal arch (1st) and palatopharyngeal arch (2nd).
- Subepithelial lymphoid tissue of the pharynx (waldeyer's ring) scattered in pharynx includes the (adenoid, palatine tonsils, lingual tonsils)
- Killian's dehiscence: potential gap between thyropharyngeus and cricopharyngeus
- Parapharyngeal space
 - Potential space lies outside the pharynx -
 - Triangular in cross section, it extend from the base of the skull above to the superior mediastinum and apex of hyoid bone
 - Potential space for tumors because of the collection of arteries and lymphoid tissue
- Retro pharyngeal space
 - It extend from the base of skull to super mediastinum.
 - Lies behind the pharynx
 - Contents: Retropharyngeal lymph nodes
 - The retropharyngeal space is actually comprised of two potential spaces, separated by the alar fascia:
 - o Anterior, the 'true' retropharyngeal space
 - o Posteriorly, the 'danger space' can connect the retropharyngeal space with superior mediastinum of the thorax.
- The nasopharynx is innervated by the maxillary branch of the trigeminal nerve (CN V).
- The oropharynx by the glossopharyngeal nerve (CN IX).
- The laryngopharynx by the vagus nerve (CN X).
- All the muscles of the pharynx are innervated by the vagus nerve (CN X), except for the stylopharyngeus which is innervated by the glossopharyngeal nerve (CN IX)
- Infectious mononucleosis
 - EBV or CMV
 - Characterised by the classic triad of fever, pharyngitis, and lymphadenopathy
 - Monospot test. (low accuracy)
- Diphtheria
 - Sore throat, fever, green (book: gray) plaques friable membrane same picture as infectious mononucleosis both have membranes over tonsils
 - Treatment: Antibiotics (penicillin or erythromycin), antitoxin
- Oral Thrush
 - White patches caused by candida albicans fungus
 - Treatment: Nystatin antifungal
- Hyponasality→ soft palate closed (closed nasality) e.g. common cold, polyp inflammation, edema,, deviated septum adenoid, turbinate hypertrophy, chronic sinusitis. (M becomes B).

- Hypernasality→ soft palate open (open nasality) → velopharyngeal dysfunction (VPD).seen in cleft palate
- There are 6 major salivary glands: 2 parotid, 2 submandibular, 2 sublingual.
- Parotids: (most common gland to get infected)
 - Serous cells only
 - Stensen's duct begins at anterior border of the gland 1.5cm below the zygoma
 - Nerve Injured during surgery Marginal mandibular nerve
- Submandibular gland:
 - Mucous and Serous cells.(Secretion is thick & mucous, so less chances of infection but more chances of stones.)
 - Submandibular triangle: Anterior and Posterior bellies of digastric and Inferior margin of the mandible.
 - Medial and Inferior to the mandible; Wharton's duct
 - Nerve injured during surgery?
 - 1.Marginal mandibular nerve (most common).
 - 2.Lingual nerve.
 - 3. Hypoglossal nerve.
- Sublingual gland:
 - Mucous secreting
 - Ducts of Rivinus (~10) along the superior aspect of the gland open into the mouth along sublingual fold in the floor of mouth
- Sialolithiasis (salivary stones)
 - formation of stones in the salivary ducts
 - Thick saliva calcification causes stone
 - Common with chronic sialoadenitis
 - Colicky postprandial pain "diagnostic".
 - History: tender, fever, short duration
 - P/E: swelling, tenderness
 - Neck CT scan use to diagnose U/S will not give details
- Pleomorphic adenoma
 - Most common salivary gland tumor (accounts for 85% of benign salivary gland tumors) usually the parotid gland (~ 80% of cases) submandibular or minor salivary glands
 - usually seen in 3rd or 4th decade
 - Slowly painless enlarging mass, non-tender on physical examination
 - CT scan with contrast and FNA to confirm the diagnosis
 - Treatment with excision
 - superficial parotidectomy to prevent recurrence, and Submandibular gland excision
- * M/C location of pharyngeal chordoma nasopharyngeal bursa
- * Quinsy (Peritonsillar abscess) no neck swelling
- * Parapharyngeal abscess neck swelling present
- * Killian's dehiscence MC site for Esophageal perforation, zenker diverticulum
- * All muscles are adductors except posterior cricoarytenoid (only adductor of Larynx

- * life saving muscle of vocal cord is posterior cricoarytenoid
- * Tracheostomy incise between 2nd and 3rd tracheal rings
- * High tracheostomy incise between 1st and 2nd tracheal rings done in case of carcinoma Larynx
- * Low tracheostomy incise between 3rd and 4th rings
- * Phonation median position (full adduction)
- * inspiration abduction
- * expiration paramedian position
- * Type 1 thyroplasty medialization of vocal folds
- * Type 2 thyroplasty lateralisation of vocal folds
- * Type 3 thyroplasty shortening/ relaxation
- * Type 4 Thyroplasty lengthening/ tension thyroplasty
- * Water's view best for maxillary and anterior ethmoid sinus
- * Caldwell's view best for frontal and ethmoidal sinus
- * Ethmoidal sinus Caldwell's > Water's view
- * Lateral view all sinuses visible
- * Choanal atresia persistence of oronasal membrane
- * Bilateral Choanal atresia child pink while crying, blue while silent
- * NLD opens into inferior meatus through valve of Hasner
- * Frontal sinus, maxillary sinus, anterior ethmoid air cells open into middle meatus
- * Artery of epistaxis sphenopalatine artery (Spa)
- * Posterior epistaxis woodruff's plexus venous plexus
- * Anterior part of vestibule is lined by keratinized, stratified squamous epithelium
- * Posterior to vestibule, epithelium become pseudostratified, ciliated columnar epithelium with goblet cells (respiratory epithelium)
- * Nasal mucosa pseudostratified ciliared columnar epithelium
- * Chronic rhinosinusitis mucosa red and congested
- * Allergic rhinosinusitis mucosa pale and bluish (mulberry appearance of nasal mucosa)
- * Parapharyngeal abscess torticollis (twisting of neck that causes the head to rotate and tilt at an odd angle)
- * uvula deviation + trismus Quinsy
- * Laryngomalacia soft, floppy aryepiglottic folds

Glomus tumor

- * benign
- * glomus tympanicum facial nerve palsy
- * glomus jugulare palsy of CN 9, 10, 11, 12
- * bleeding aural polyp
- * CHL
- * pulsatile tinnitus

Structures passing through foramen ovale MALE

- * mandibular nerve
- * accessory meningeal artery
- * lesser petrosal nerve
- * emissary vein

Structures passing through superior orbital fissure (Live Frankly To See Absolutely No Insult)

- * Lacrimal nerve
- * Frontal nerve
- * Trochlear nerve
- * Superior ophthalmic vein
- * Superior division of occulomotor nerve
- * Abducens nerve
- * Nasociliary nerve
- * Inferior division of occulomotor nerve

Structures passing through Optic canal (CO2)

- * Optic nerve
- * Opthalmic nerve
- * Central vein of retina

CA Larynx

- * T1 vocal cord involve/ mobile
- * T2 >1 structure involved
- * T3 vocal cord fixed
- * T4 extra laryngeal extension

CECT of JNA

- * Antral/ Holman miller sign anterior bowing of posterior maxillary wall
- * Hondusa sign widening of pterygo maxillary tunnel

Trotter's triad or sinus of Morgagni syndrome

Mnemonic: NPC

- * neuralgia (trigeminal neuralgia)
- * palatal palsy
- * conductive hearing loss

Hot potato voice seen in

- * Quinsy
- * Acute parapharyngeal abscess
- * Acute epiglottitis

Muscles of Larynx

- * Thyroaretynoid
- * Lateral cricoarytenoid
- * Posterior cricoarytenoid
- * Interarytenoid
- * Cricothyroid

Causes of hoarseness

- * overuse of voice
- * cancer invading laryngeal nerves (parathyroid, thyroid, bronchus, esophagus, hypopharynx)
- * iatrogenic injury during surgery
- * neck trauma leading to laryngeal nerve injury

Fursteberg test and trans illumination test

- * postive in encephalocele and meningocele
- * negative in nasal glioma

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

Septal perforation

- * Cartilagenous perforation caused by mycobacterium
- * bony perforation caused by syphilis

Atrophic rhinosinusitis (ozaena)

- * pseudostratified ciliated columnar epithelium is replaced by stratified squamous epithelium
- * Bilateral nasal obstruction
- * crust formation
- * foul smell
- * merciful anosmia

Potts puffy tumor

- * osteomyelitis of frontal bone
- * subperiosteal abscess of frontal sinus

Most common sinus affected in

- * Mucocele/ Pyecele frontal sinus
- * Mucus retention cyst maxillary sinus
- * subperiosteal abscess ethmoid sinus
- * Aspergioma maxillary sinus
- * osteoma frontal sinus
- * Allergic fungal rhinosinusitis maxillary sinus

Most common complication of acute otitis media

- * perforation
- * mastoiditis