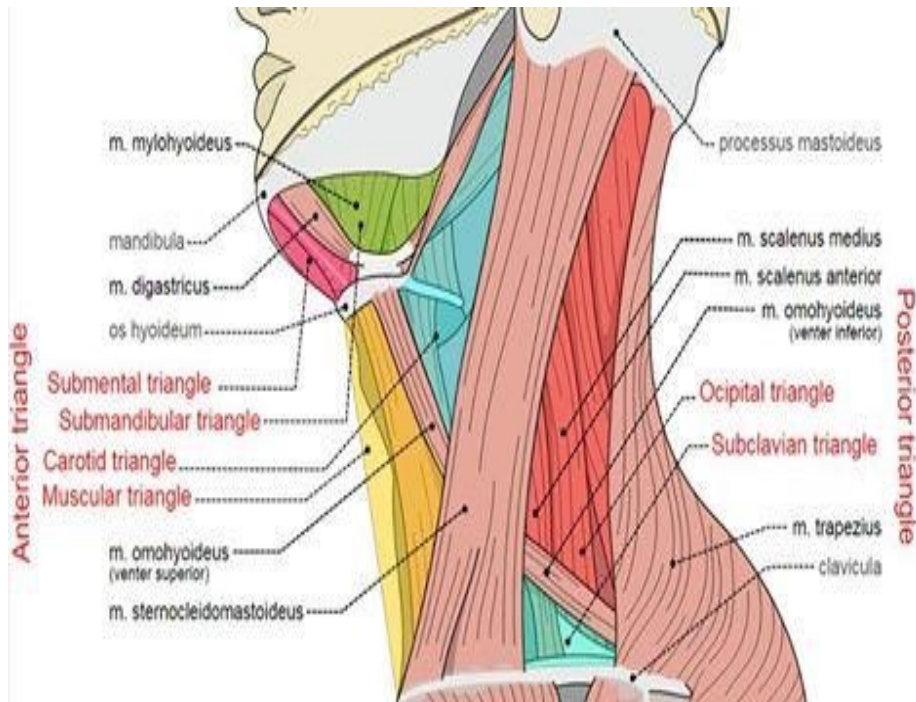


Endocrine



Significance of neck triangles

- 1 Submental triangle: Ludwig's angina (pus in this triangle)
- 2 Submandibular triangle: LN and glands, facial and lingual arteries, lingual and mandibular nerves.
- 3 Carotid triangle: carotid art, IJV, and vagus nerve... Carotid body tumor.
- 4 Muscular triangle: contains the strap muscles
- 5 Posterior triangle: occipital and supraclavicular triangle

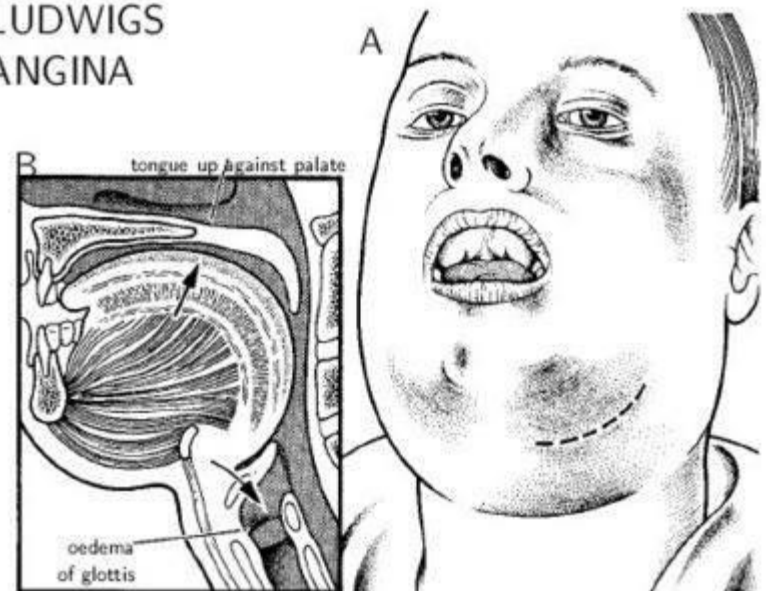
Ludwig angina

pus accumulation in the **submental triangle**. causes pressure on the larynx and epiglottis and suffocation.

treated surgically by opening the submental area and draining the pus.



LUDWIGS
ANGINA

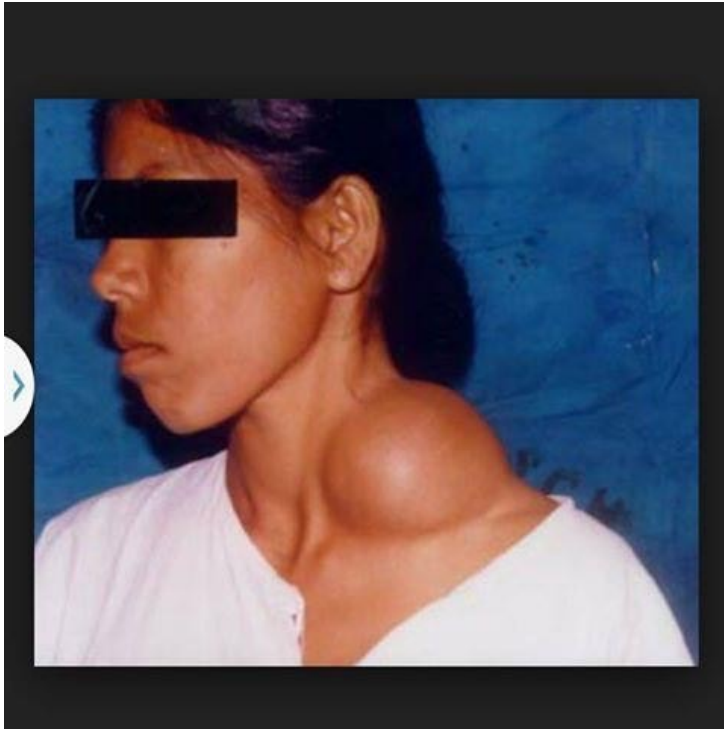


Carotid body tumor : in carotid triangle

- moves side by side.
- Dx: carotid angiogram.
- Surgical excision and preoperative embolization.
- Lateral mass.



- Internal Jugular Vein
- Carotid Body Tumour
- Submandibular gland
- Sternocleidomastoid muscle



Branchial cyst

- Smooth surface and globular.
- At the level of junction between upper and middle 1/3 of SCM.



Branchial fistula

- formed by the 2nd branchial cleft and pouch.
- lined by ciliated columnar epithelium.
- Discharge : mucus or muco-pus.
- in anterior triangle.
- at junction between middle and lower third of SCM.
- congenital.
- surgery (excision).



Sublingual dermoid cyst

- Midline congenital mass.
- Contents : hair follicles/ sebaceous cyst/ sweat glands.

Plunging ranula



Ranula : cystic mucosa extravasation from sublingual salivary gland.

Plunging : if extended through mylohyoid muscle.

Treatment : excision.

Level I: below mylohyoid muscle and above the lower margin of the hyoid bone. anterior to the posterior border of the submandibular glands

level Ia: submental nodes - between the anterior bellies of the digastric muscles

level Ib: submandibular nodes - posterolateral to the anterior belly of the digastric muscles

Level II

internal jugular (deep cervical) chain

base of skull to inferior border of hyoid bone

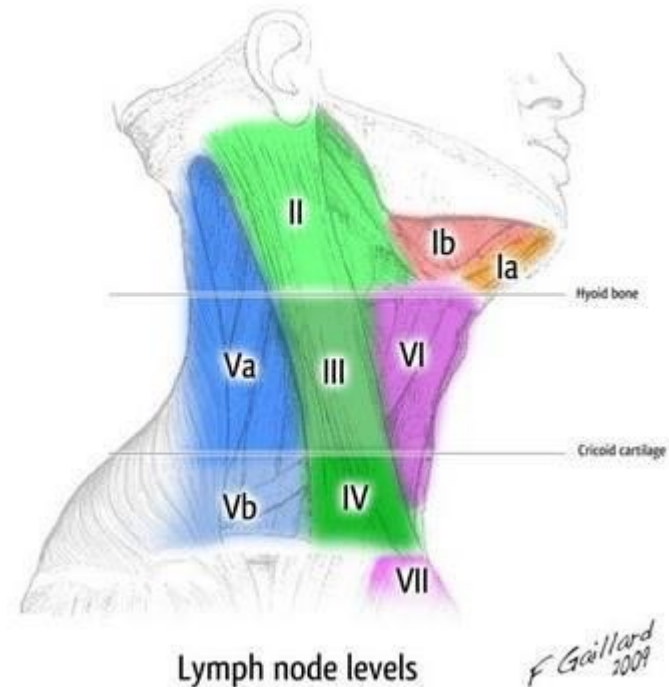
anterior to the posterior border of

sternocleidomastoid (SCM) muscle

posterior to the posterior border of the submandibular glands

level IIa: anterior, lateral, or medial to the vein or posterior to the internal jugular vein and inseparable from it

level IIb: posterior to the internal jugular vein and have a fat plane separating the nodes and the vein



Level III

internal jugular (deep cervical) chain

lower margin of hyoid to lower margin of cricoid cartilage

anterior to the posterior border of SCM

lateral to the medial margin of the common carotid artery (CCA)/internal carotid artery (ICA)

Level IV

internal jugular (deep cervical) chain

lower margin of cricoid cartilage to level of the clavicle

anterior and medial to an oblique line drawn through the posterior edge of the sternocleidomastoid muscle and the posterolateral edge of the anterior scalene muscle 4

lateral to the medial margin of the CCA

Level V

posterior triangle (spinal accessory) nodes

level Va: superior half, posterior to levels II and III (between base of skull and inferior border of cricoid cartilage)

level Vb: inferior half, posterior to level IV (between inferior border of cricoid cartilage and the level of clavicles)

Level VI

prelaryngeal/ pretracheal/ Delphian node

anterior to visceral space

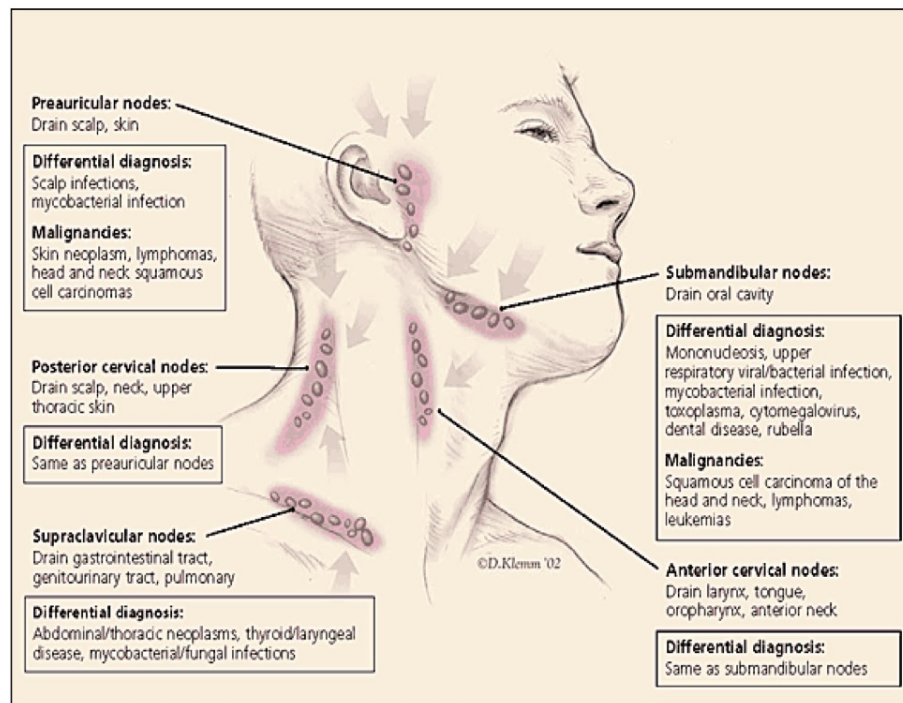
from inferior margin of hyoid bone to manubrium

anterior to of levels III and IV

Level VII

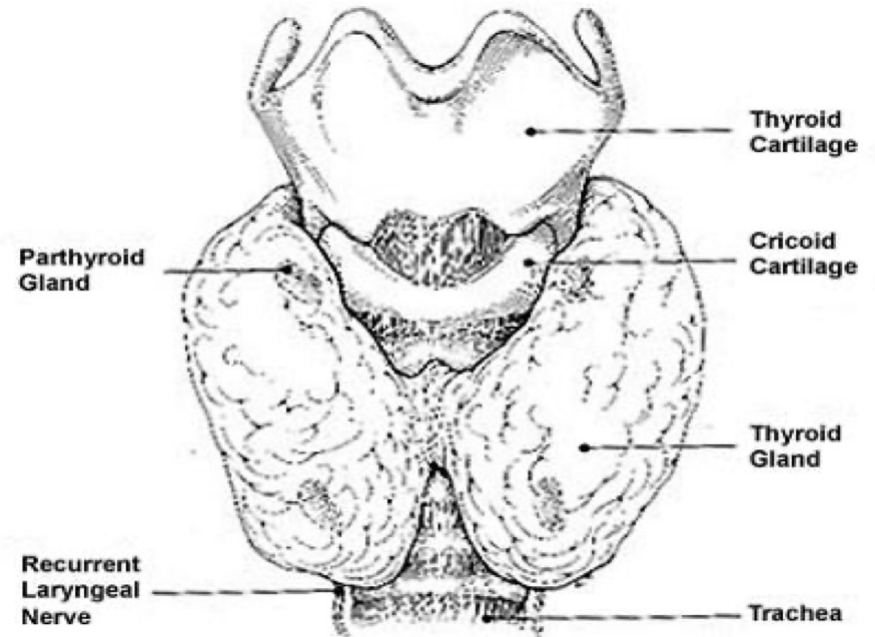
superior mediastinal nodes

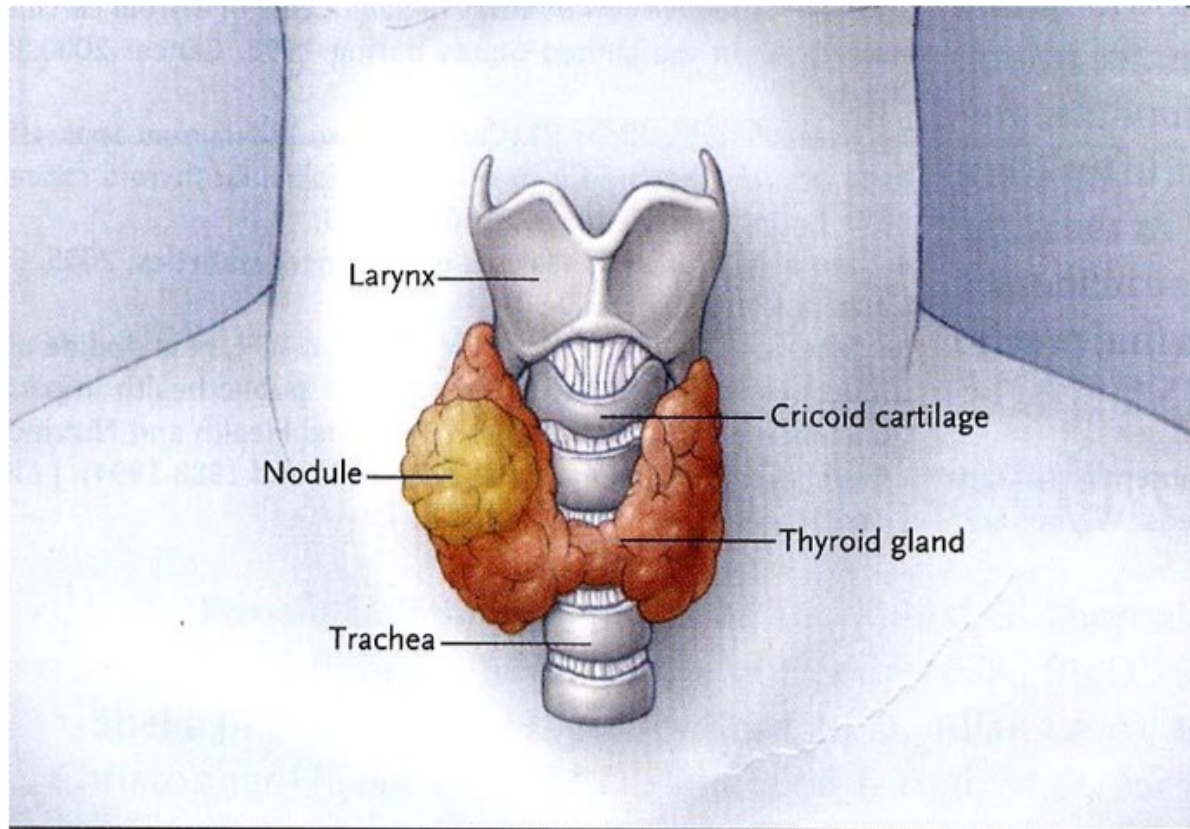
between CCAs, below superior aspect of manubrium



Approach to thyroid nodul

Anatomy of the thyroid gland





Benign Nodules (95%)

Hyperplastic nodules (85%)
 Adenomas (15%)
 Cysts (<1%)

Carcinomas (5%)

Papillary (81%)
 Follicular and Hürthle-cell (14%)
 Medullary (3%)
 Anaplastic (2%)

Common Varieties of Thyroid Nodules.

Anatomy of the parotid gland

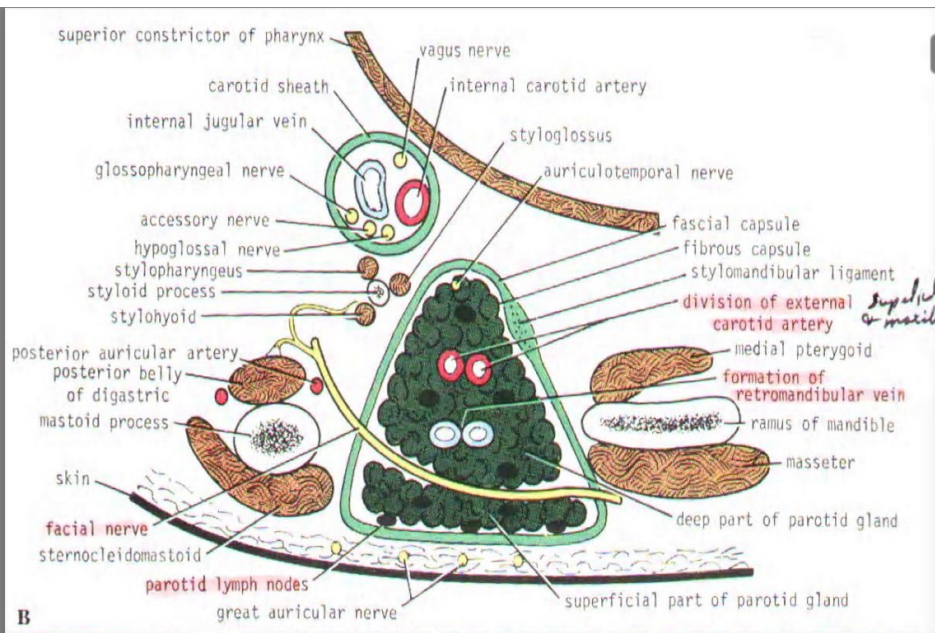
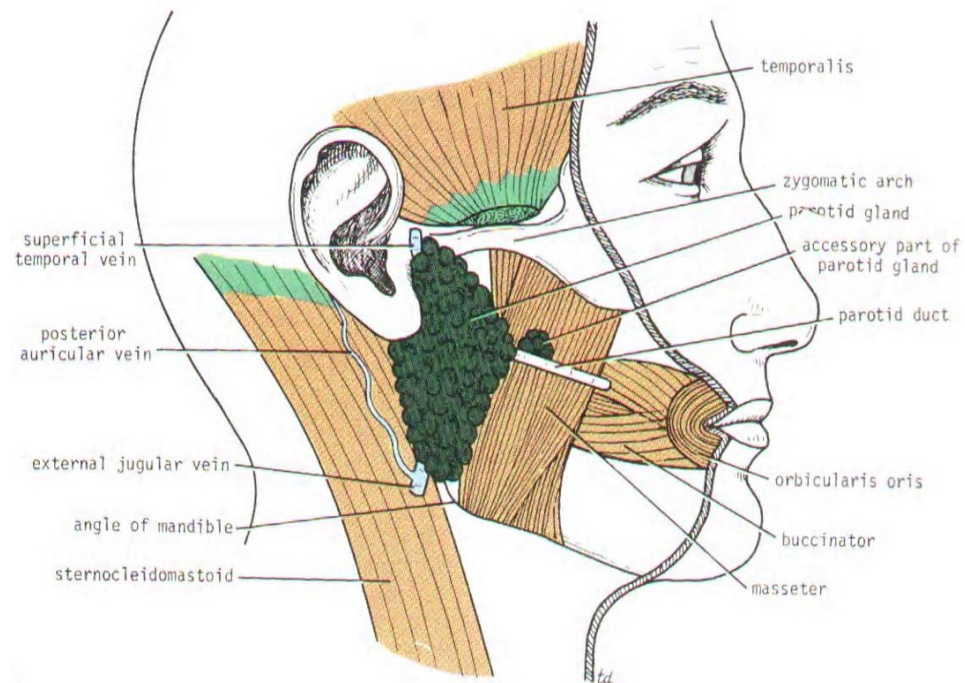


Fig. 11-26. Parotid gland and its relations. (A) Lateral surface of gland and course of parotid duct. (B) Horizontal section of parotid gland.



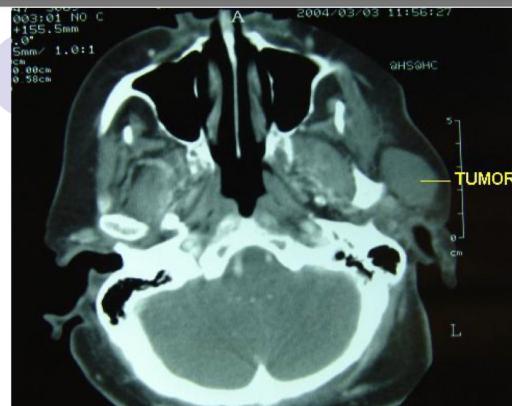
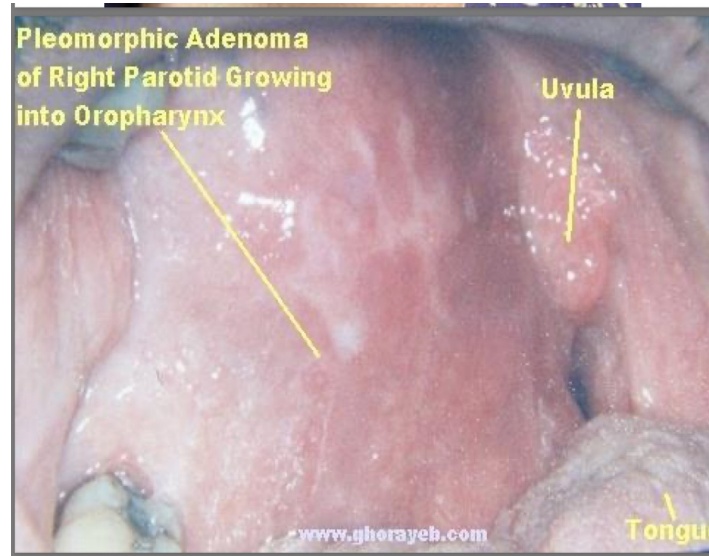
Parotid gland



Swollen parotid gland



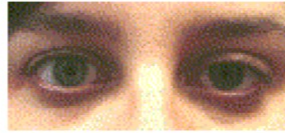






- Right parotid pleomorphic adenoma on coronal MRI scan of the neck

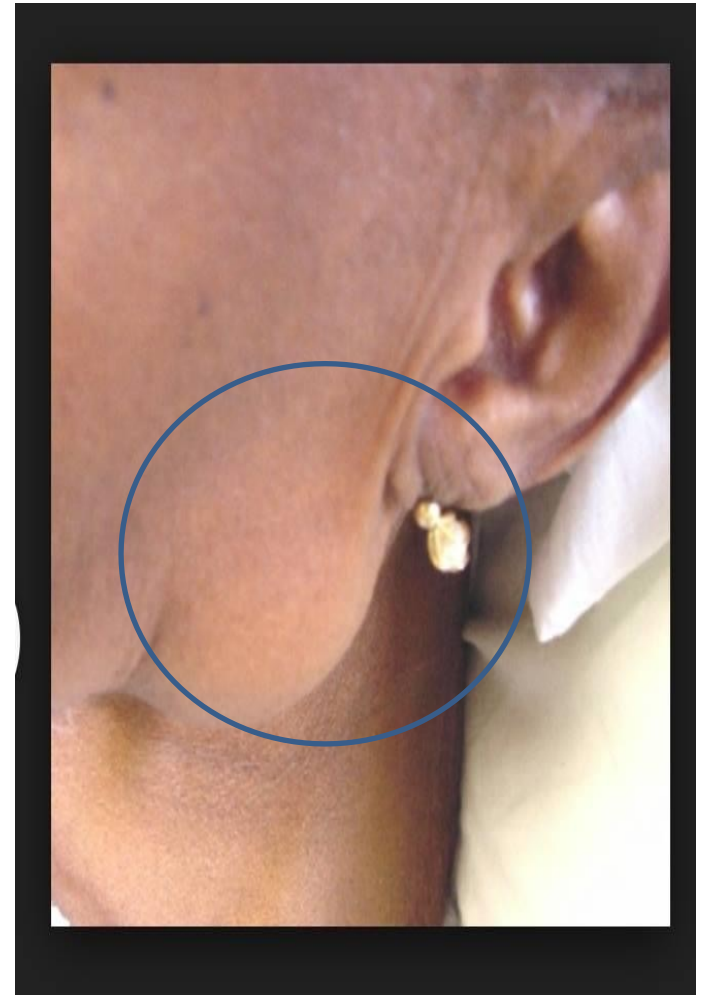






Pleomorphic adenoma

- **Benign** salivary gland tumor.
- The most common salivary gland tumor.
- Usual location : parotid gland.
- single firm, mobile, well-circumscribed mass.
- **Painless.**
- Slow growing.



**Pleomorphic adenoma .
Gross section**



Carcinoma Ex-Pleomorphic Adenoma



Mucoepidermoid carcinoma



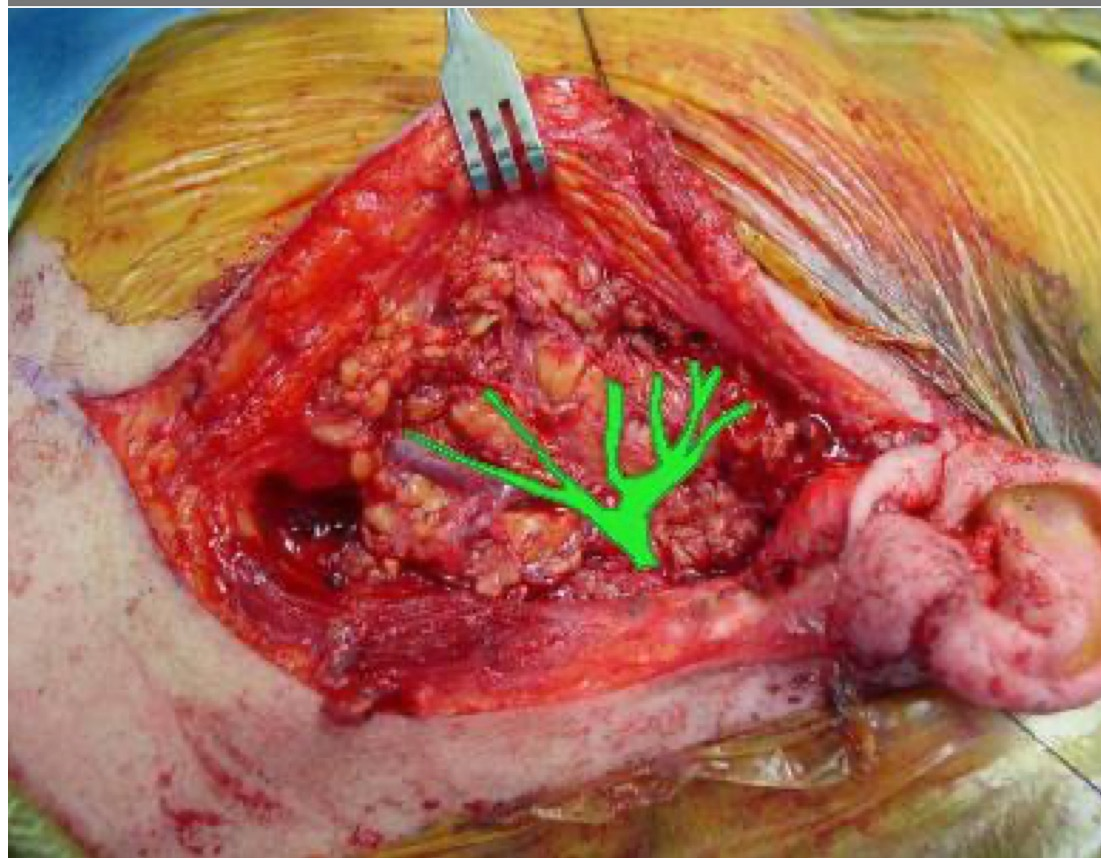


- Parotidectomy incision

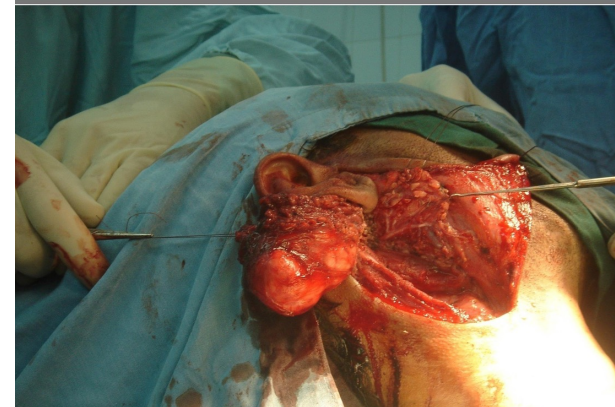
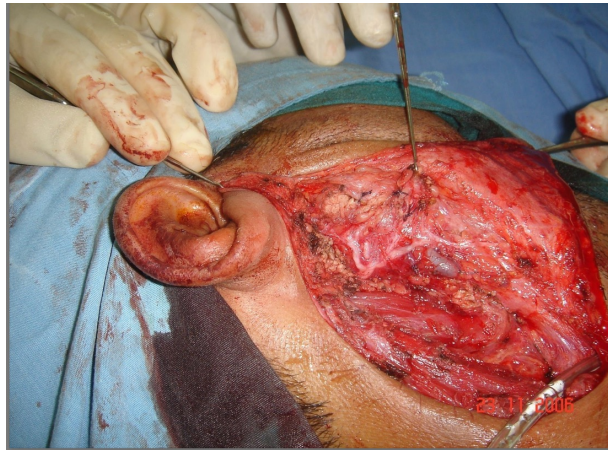
- 6 weeks later



Superficial Parotidectomy



Extended Radical Parotidectomy



Sialolithiasis = salivary calculi = salivary stones

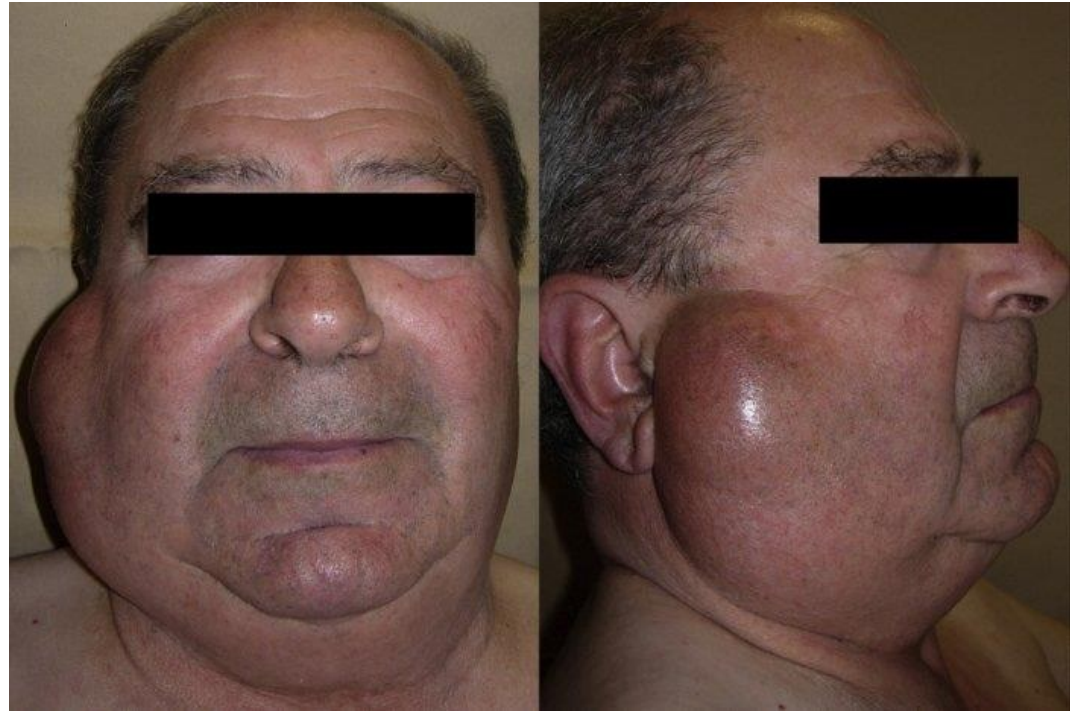


Submandibular salivary gland stone

- The stone is located in the Wharton's duct (most common site) : in the floor of the mouth near the frenulum of the tongue.

Warthin's tumor

- is the second most common benign salivary gland tumor.
- More in males.
- Associated with smoking.
- **Only in parotid.**
- Usually at the tail of parotid.
- Cystic mass.



Pharyngeal pouch

- Diverticulation in pharyngeal mucosa.
- Bulge through weakness in the pharyngeal constrictor muscle on the left side.
- Common in elderly men.
- Dysphagia/ halitosis/ swelling in the neck that gurgles.
- **Dx : barium swallow.**



Trousseau's sign : Carpal spasm after occlusion of blood to the forearm with a BP cuff in patients with **hypocalcaemia**.

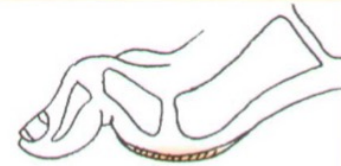


Diabetic foot

Stages of diabetic foot



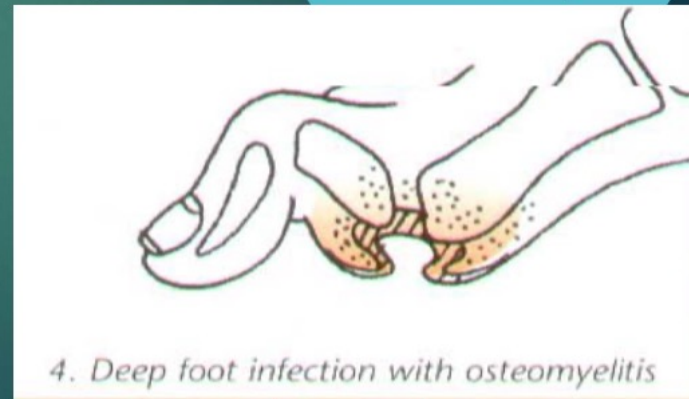
Fig 1. Illustration of ulcer due to repetitive stress

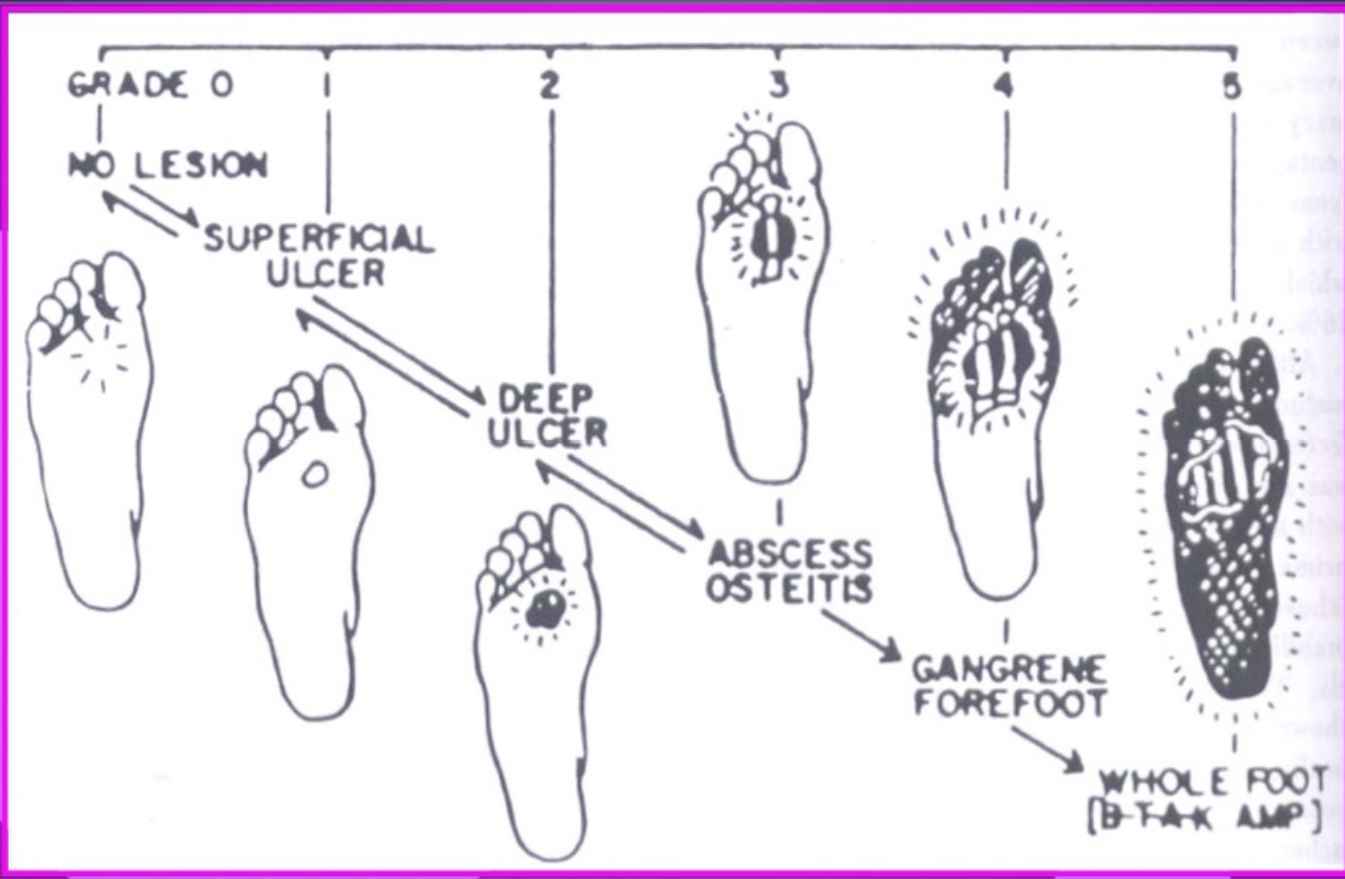


1. Callus formation

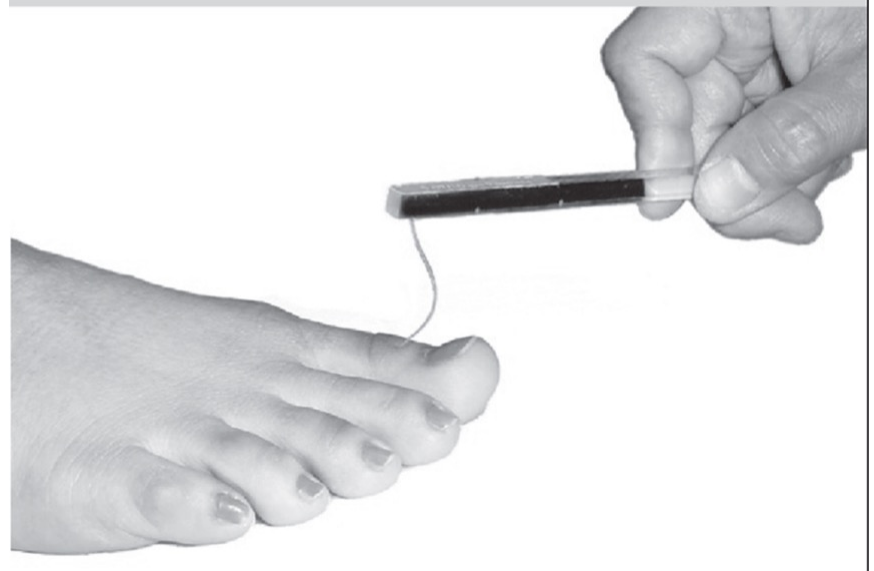


2. Subcutaneous hemorrhage





**Rapid screening for
diabetic neuropathy
using the 10-g Semmes-
Weinstein Monofilament**



**Treatment of diabetic
foot : -**

Total contact cast



Charcot foot

- Rocker-bottom appearance.
- Develops as a result of neuropathy such as in diabetic pts.
- ttt : immobilization/ custom shoes & bracing.



Lower extremity amputations

Indications : irreversible tissue ischemia & necrotic tissue/ severe infection / severe pain with no bypassable vessels, or if pt is not interested in a bypass procedure.



Bellow knee amputation



Above knee amputation

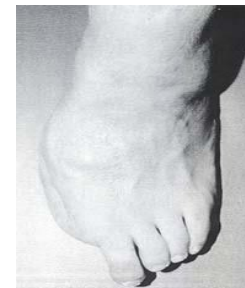


Syme's amputation

Through the articulation of the ankle with removal of the malleoli.



Transmetatarsal amputation



Ray amputation

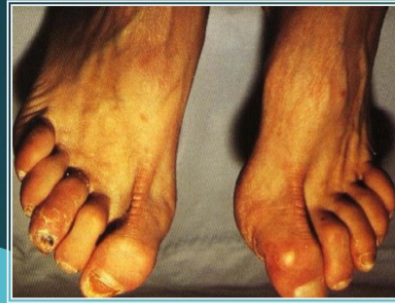
Removal of toe & head of Metatarsal.



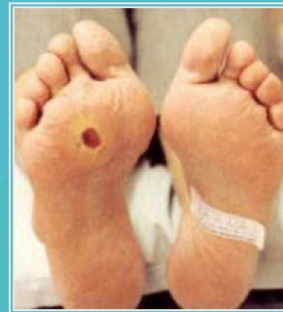
INGROWN TOENAILS



CORN & CALLUS



HAMMER TOE



ULCER



CHARCOT JOINT



HALUX VALGUS



IRRITATIONS, SKIN LESIONS

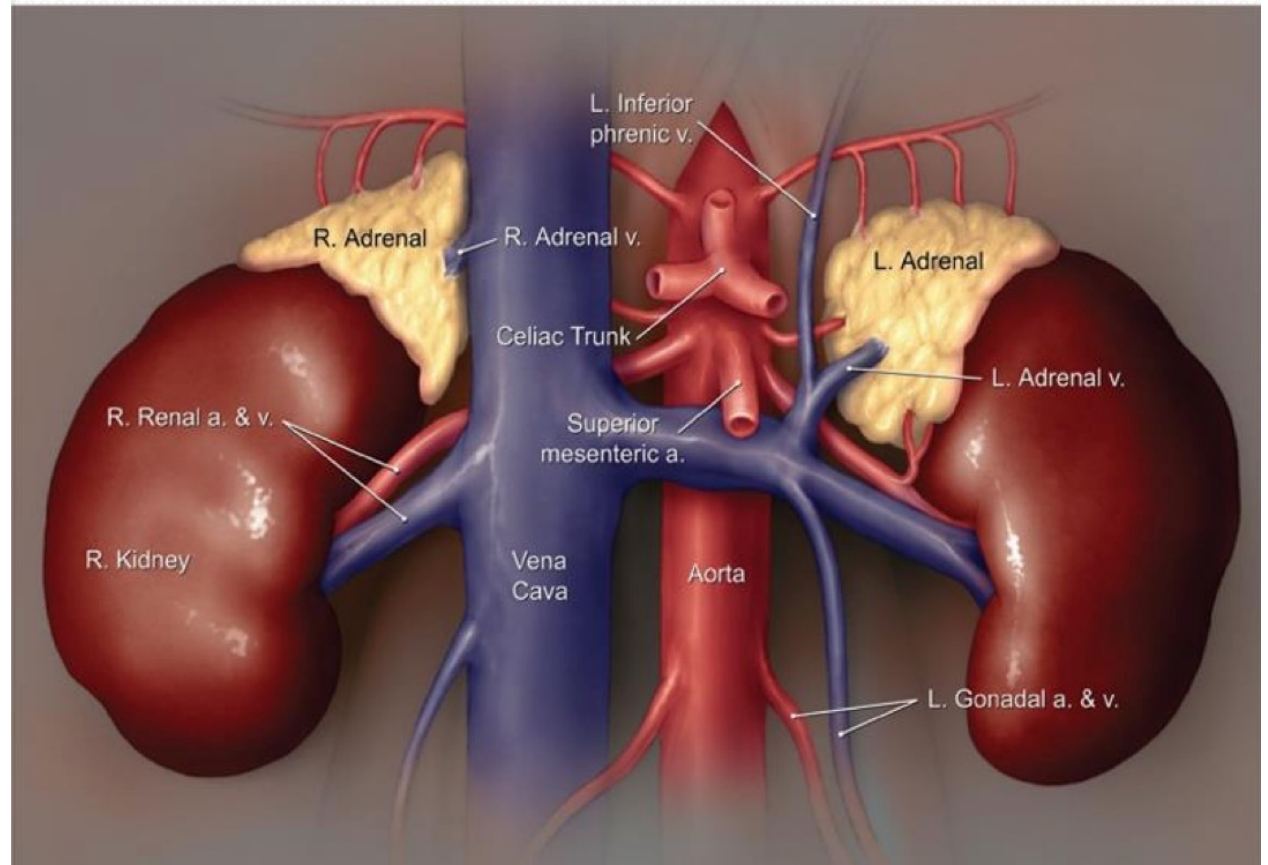


BLISTER

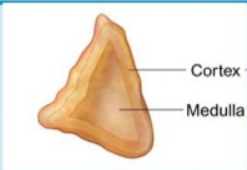



CUTS BETWEEN YOUR TOES

Adrenal gland anatomy



Comparison between Rt. & Lt. Suprarenals

Right Suprarenal	Left Suprarenal
	
Triangular (pyramidal)	Crescentic (semilunar)
Does NOT reach the hilum of the right kidney	Reaches the hilum of the left kidney
The hilum is directed upwards	The hilum is directed downwards
Its vein is short and drains to the IVC	Its vein is long and drains to the left renal vein.