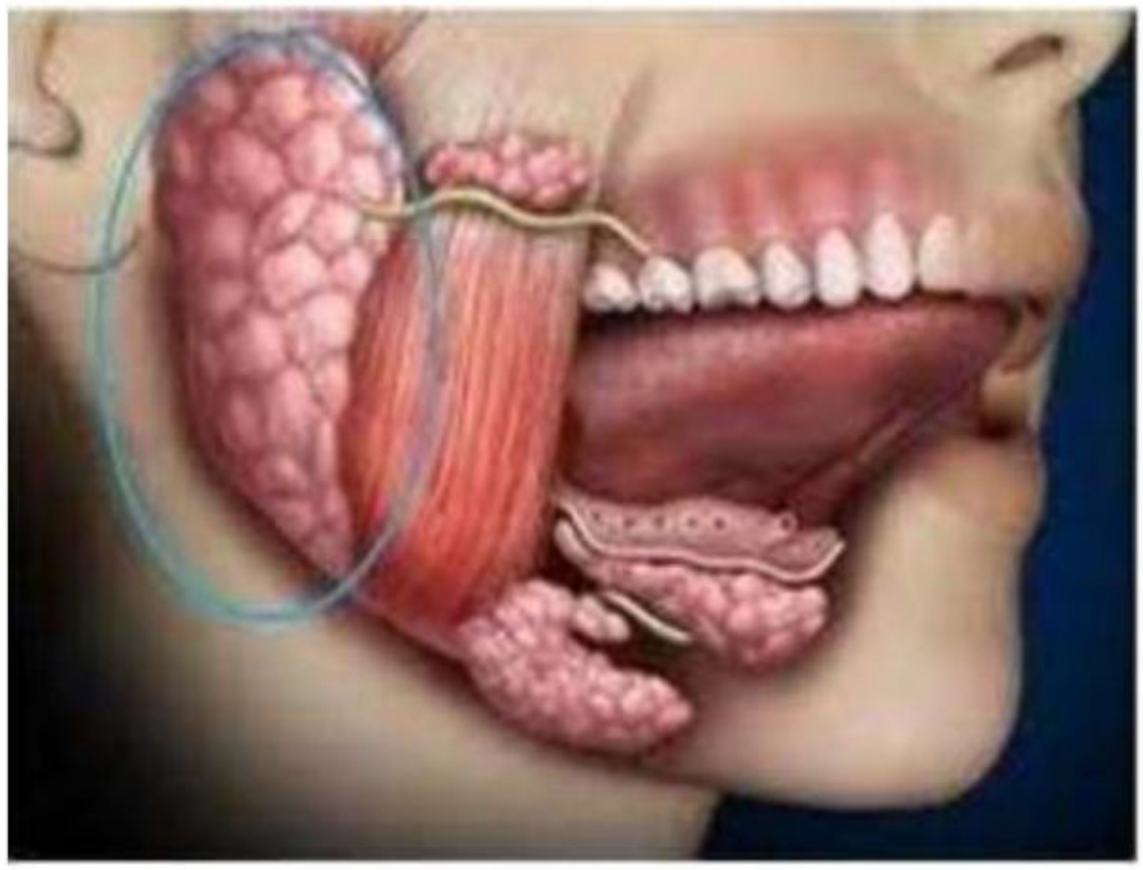
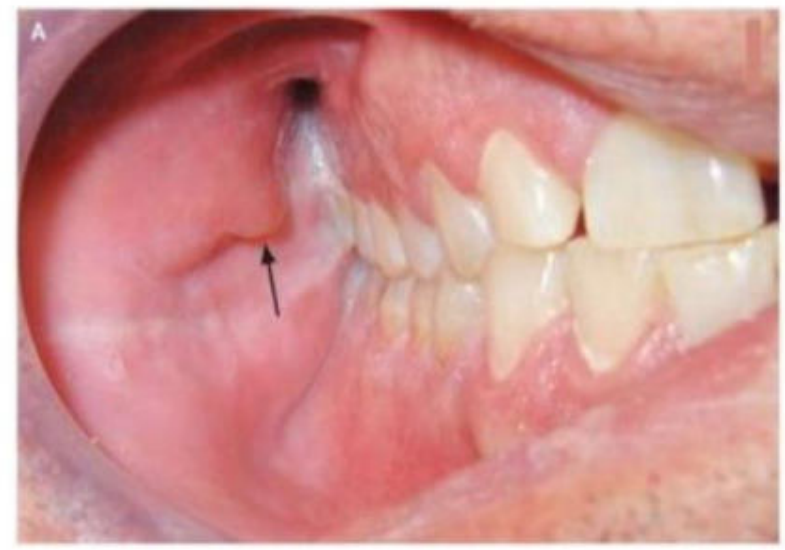
Parotid Gland And Tumour

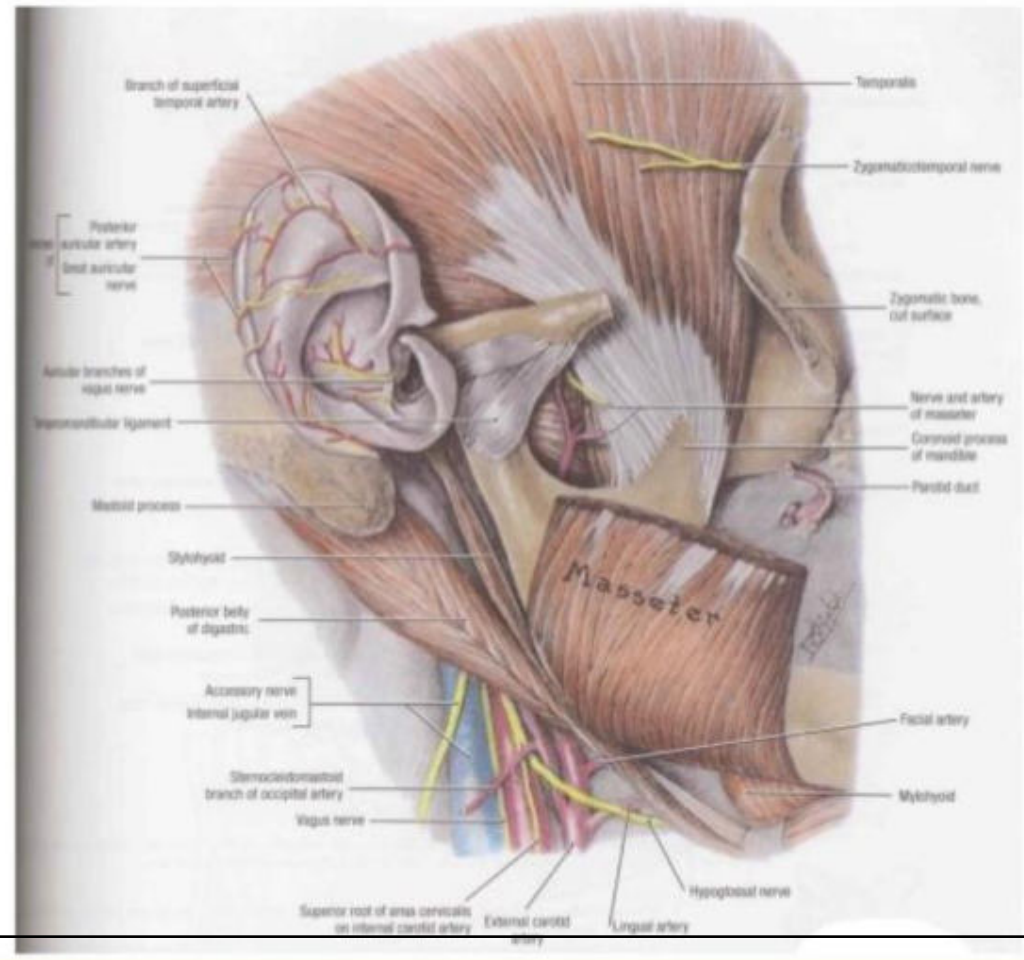
Salivary Glands

Parotid Gland

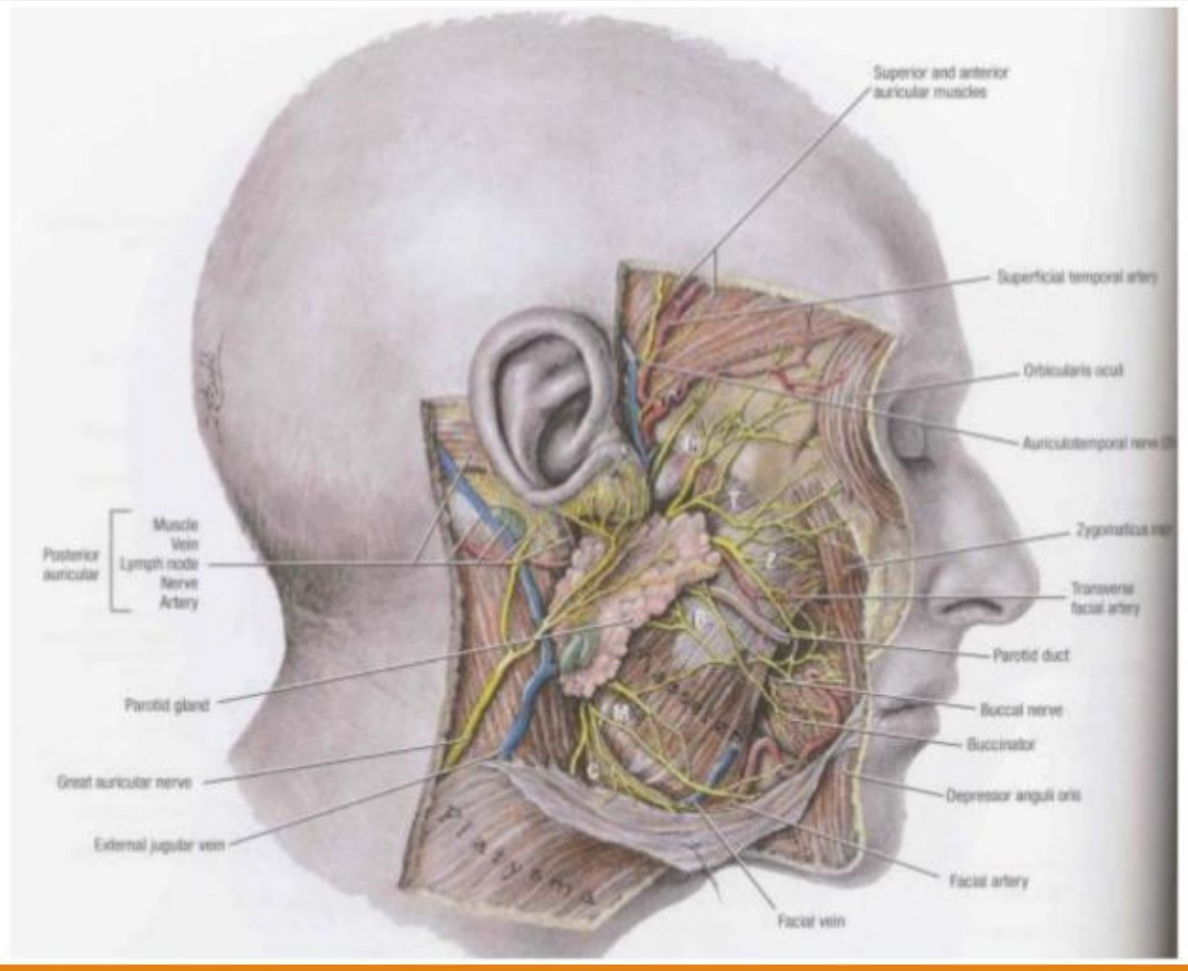




Parotid Space



Parotid gland



Facial Nerve- “Pes Anserinus”

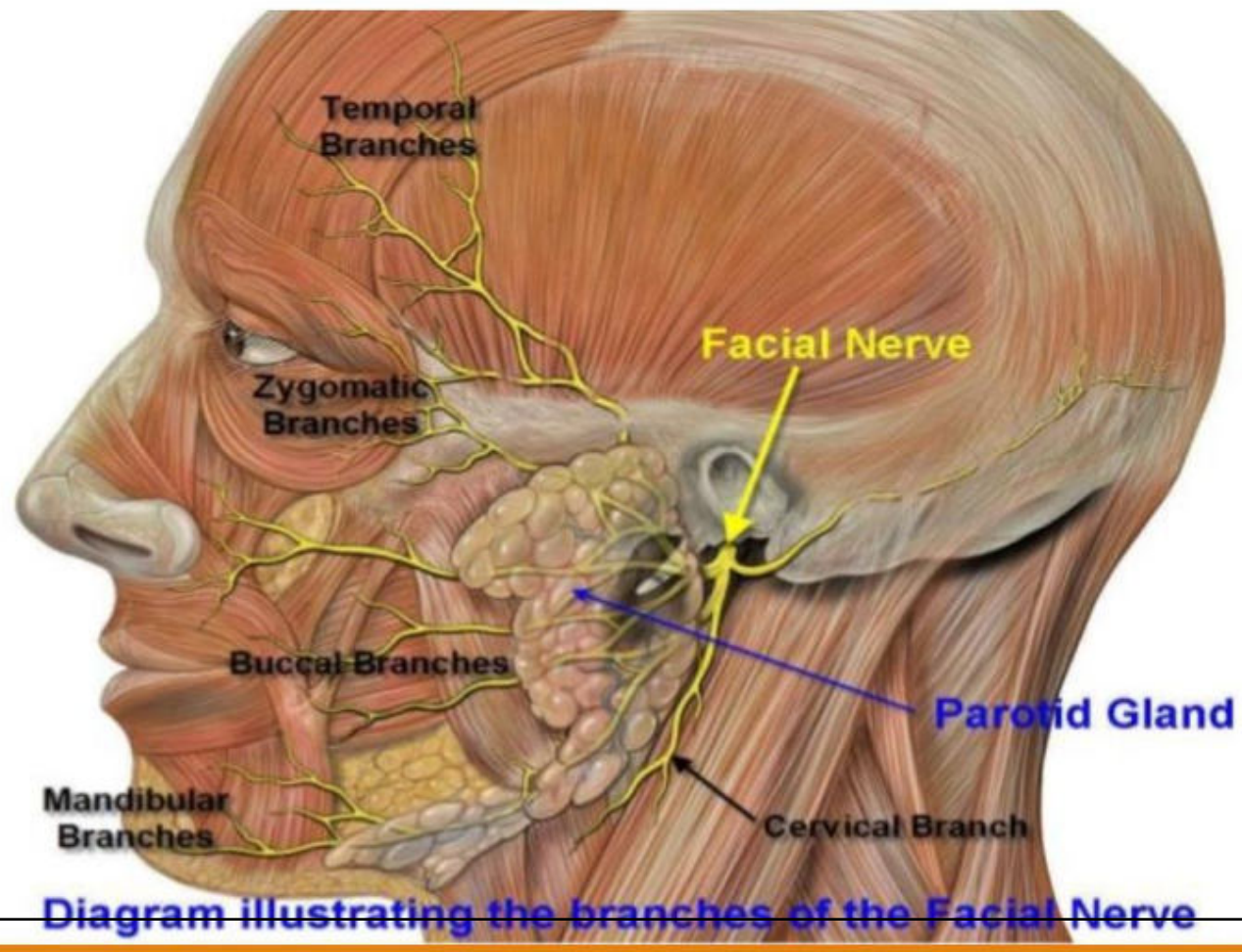
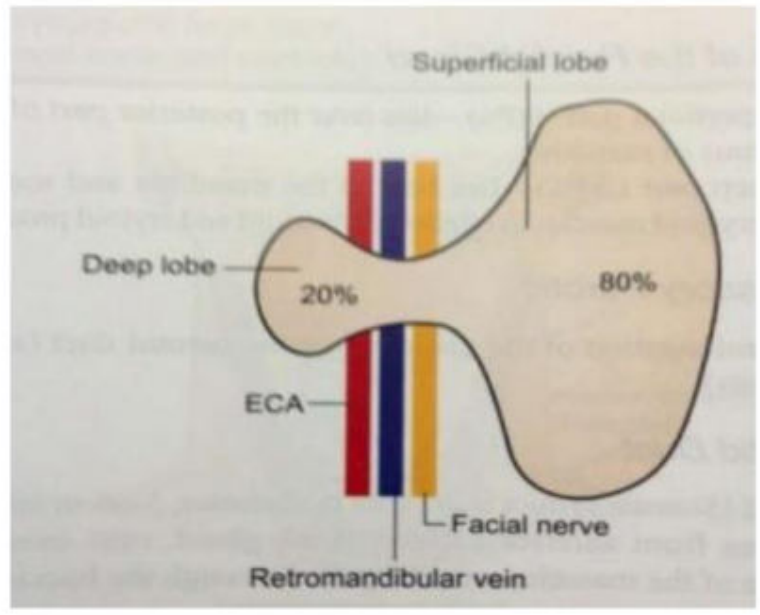
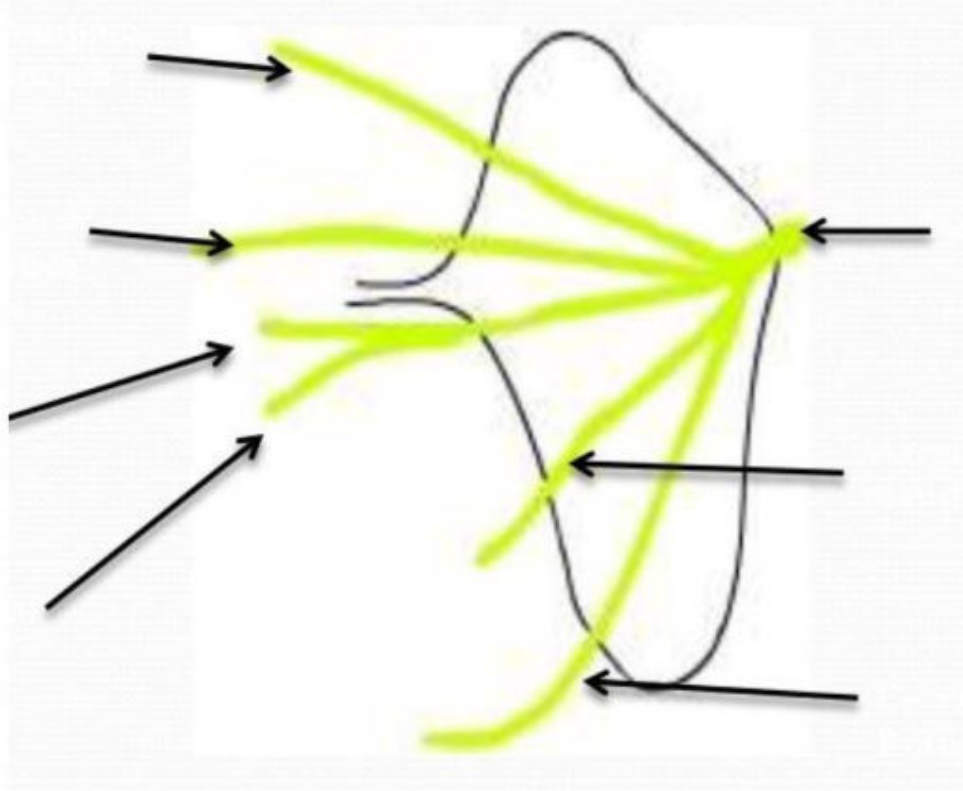


Diagram illustrating the branches of the Facial Nerve

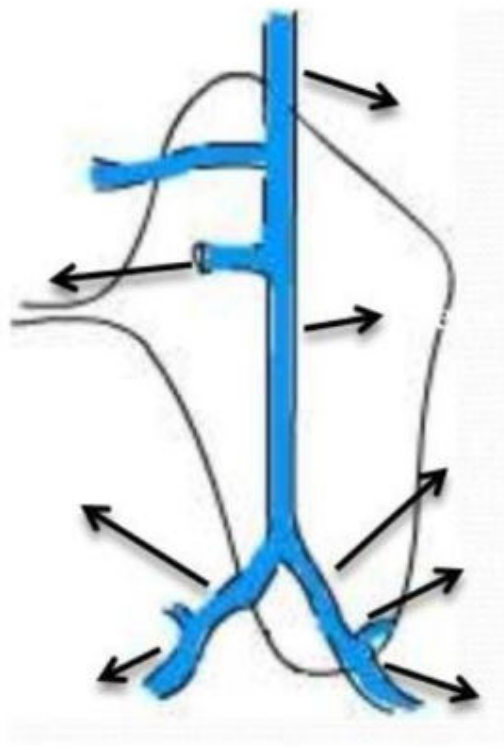
Facio-venous plane of PATEY



Identify the sketch……



Identify the sketch……



Identify the sketch……

Parotid tumors

BENIGN

- Pleomorphic adenoma
- Warthin's tumor

MALIGNANT

- Mucoepidermoid carcinoma
- Adenoid cystic carcinoma
- Acinic cell carcinoma
- Adenocarcinoma
- Squamous cell carcinoma

Pleomorphic adenoma

.Also k/a "Mixed Tumor"

.Most common benign tumor of salivary glands- 80%

.Neoplastic proliferation of glandular tissue with myoepithelial component

.Distribution:

Parotid(84%) > submandibular(8%) > lingual(0.5%)

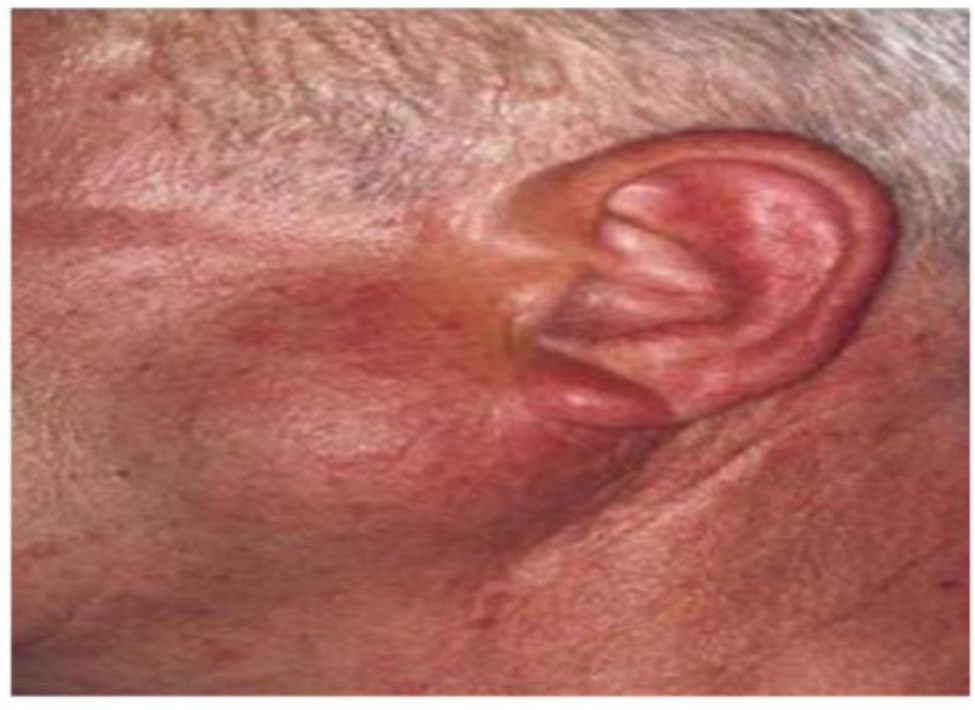
.F:M= 3:1

Clinical presentation

.Smooth firm lobulated mobile swelling

.Commonly arise near the tail of parotid

.In superficial part



Clinical presentation……

.If tumor present in Deep Lobe

Extend through stylomandibular tunnel

Pushes tonsils, pharynx and uvula

Pressure effect may cause dysphagia

Long term sequel- Malignant change

.Recent increase in size

.Pain- cause

- Capsular distention
- Salivery duct obstruction
- Infiltration of nerve
- Tumor necrosis

.Nodularity

.Involvement of skin, lymph nodes, facial nerve and masseter muscle

.Restriction of jaw movement

Clinical examination

.Smooth firm lobulated mobile swelling

.Positive curtain sign

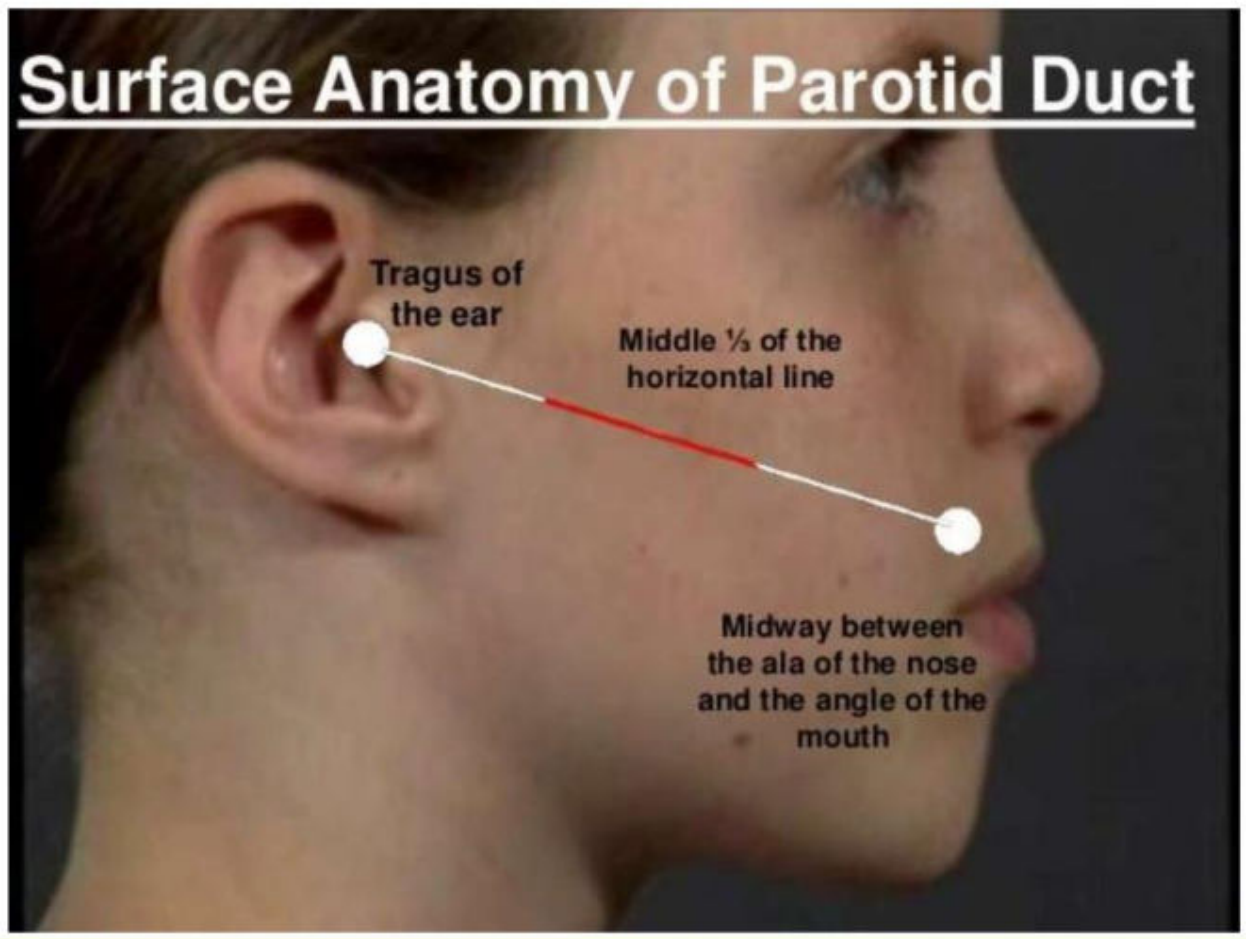
.Lifted ear lobule

.Involvement of facial nerve- palsy

.Bimanual palpation- for deep lobe

.Opening of the stensons duct

Parotid duct palpation



Diagnosis

.Fine needle aspiration cytology

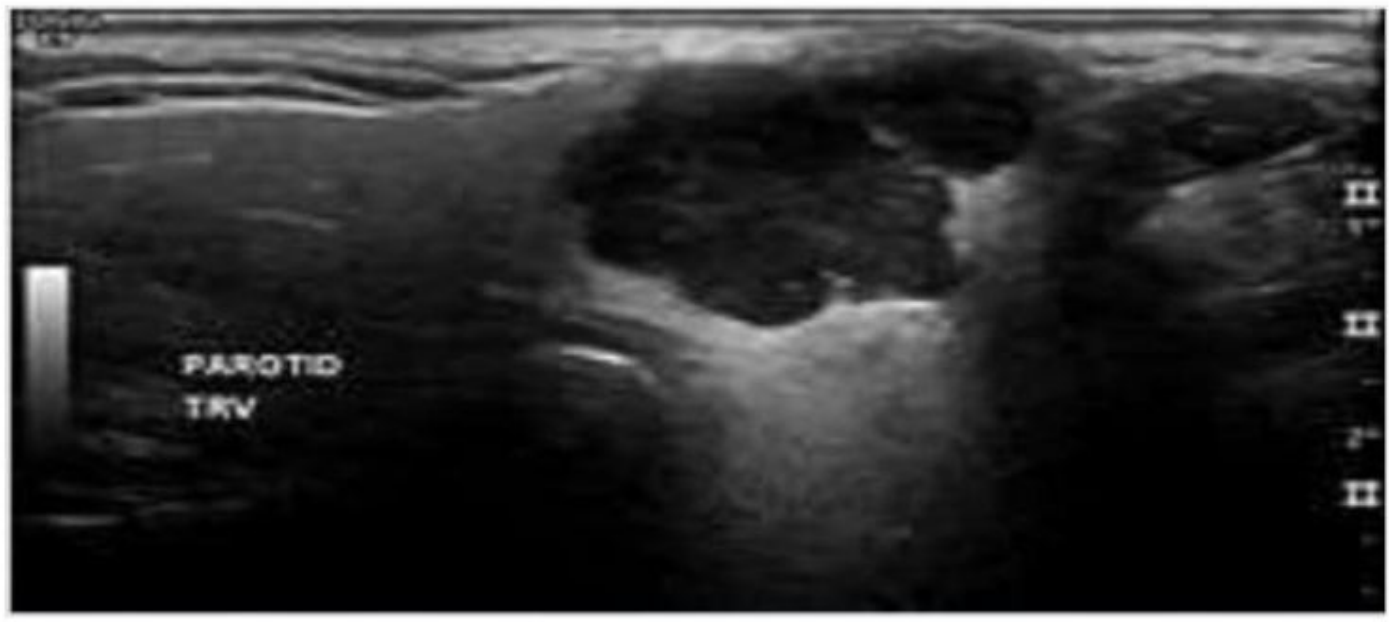
.Core needle biopsy

.Ultrasonography

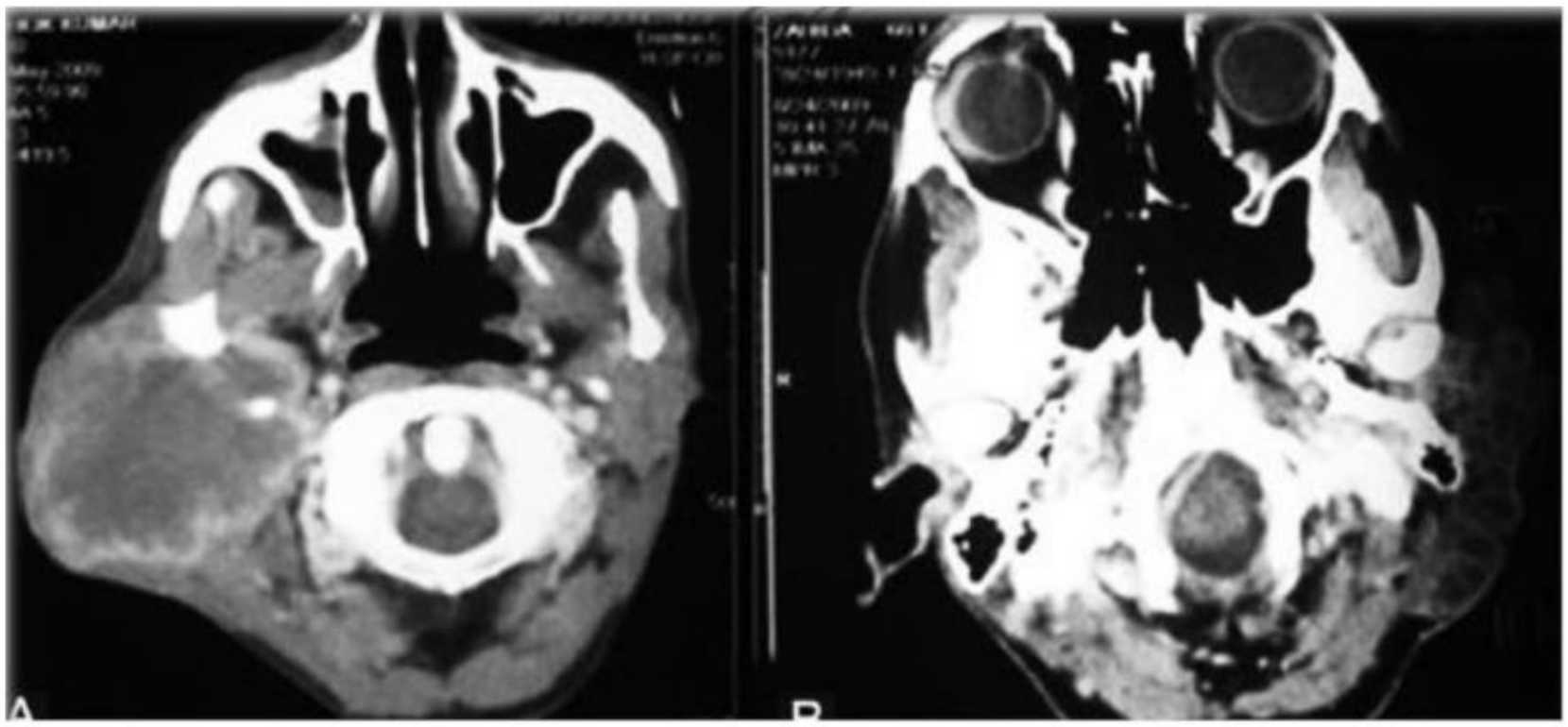
.CT scan

.MRI scan

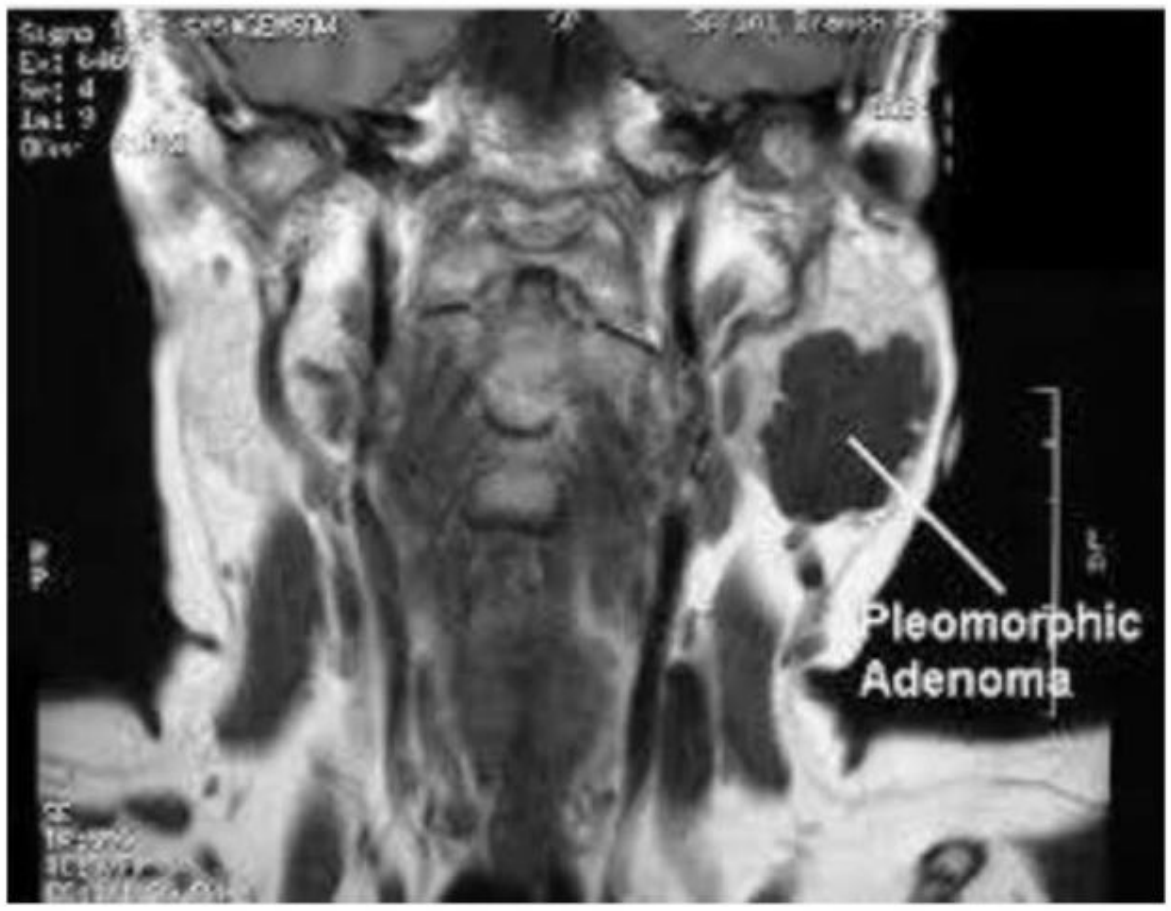
USG- hypoechoic lobulated lesion



CT scan



MRI scan



Management

.Surgical excision of tumor

Superficial parotidectomy - PATEY'S operation

Total parotidectomy

.Complication:

Facial nerve injury

Recurrence 5-50%

Warthin’s tumor

.Also k/a Adenolymphoma or Papillary Cystadenolymphomatosum

.Benign tumor occur in only parotid gland.

.2nd MC benign tumor

.Bilateral 10-15%

.M:F= 4:1

.Association:

Cigarrete smoking

Irradiation

Warthin’s tumor……..

.Often multicentric

.Typically heterogenous on imaging ie having cystic component frequently

.On *T-99 pertechnetate scan- “*Hot spot” due to high mitochondrial content, a characteristic feature.

.Management:

Excision of tumour

Risk of recurrence –nil

No malignant change

Mucoepidermoid tumor

.Commonest malignant tumor

.Most common in parotid gland

.Etiology: radiation

.Early stage- painless gradually progressive mass

.Later on- may involve facial nerve

.On the basis of cellular characteristic: 3 grade

Low grade

Intermediate grade

High grade

Mucoepidermoid tumor……..

.Management:

.Low grade –

WLE or superficial parotidectomy

.High grade-

Radical parotidectomy with neck node dissection and adjuvant therapy

Adenoid cystic carcinoma

.Slow growing high malignant tumor

.High affinity to perinural extension

.Management:

Radical parotidectomy with adjuvant cth

Fast neutron therapy

Parotid surgery

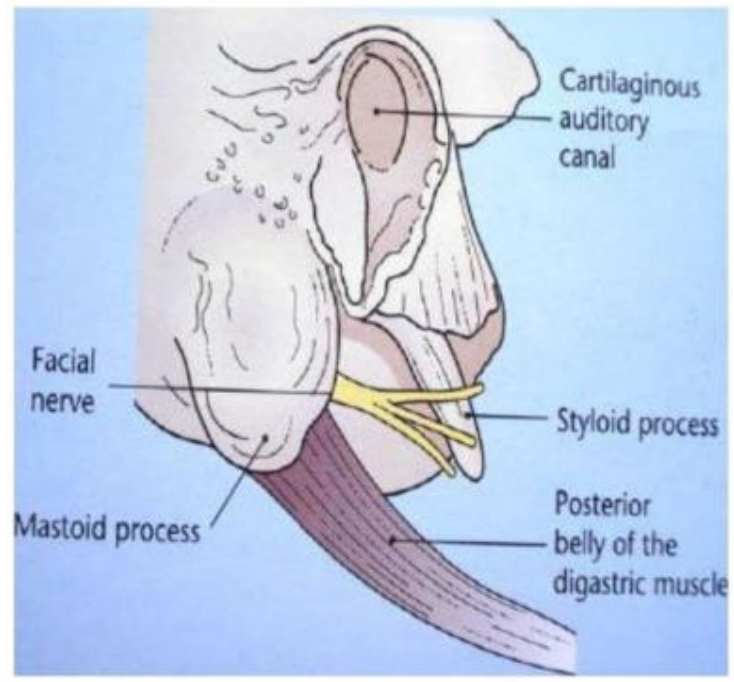
.Superficial Parotidectomy

.Total Conservative Parotidectomy

.Radical Parotidectomy

Intraop- identification of facial nerve

- Tragal Pointer of CONLEY'S- tip of inferior portion of cartilaginous canal
- Tracing the tendinous insertion of posterior belly of digastric muscle
- Nerve just lateral to styloid process
- Hamilton bailey technique- tracing from distal to proximal
- By use of nerve stimulator



Indication of facial nerve sacrifice

.Preoperative weakness or paralysis of nerve

.Evidence of gross invasion

.Tumor transgressing from superficial to deep part

Complication of parotidectomy

- Facial nerve injury
- Haemorrhage
- Salivary fistula
- Flap necrosis
- Frey's syndrome
- Injury to great auricular nerve

Frey's syndrome

Nerve supply

- Parasympathetic:

  Secreto-motor- from otic ganglion – postganglionic fibre via auriculo-temporal nerve

- Sympathetic:

- Sensory:

  Great auricular nerve – to parotid fascia

Frey's syndrome……

After injury

.secretomotor fibres from auriculotemporal nerve grow out

.joins with distal end of great auricular nerve.

.Also k/a "Gustatory Sweating"