HPI

4 years PTA	Painless preauricular mass, R 3x2 cm No other associated signs and symptoms No consult, no meds
1 month PTA	Patient was denied for pre-employment which prompted him to consult a private MD Advised OR, however lost to follow up
1 week PTA	Persistence of preauricular mass (+) consult OMMC Advised admission for definitive management

PE: conscious, coherent, NICRD
BP 110/80 CR 96 bpm RR 23 cpm T 37.3ºC

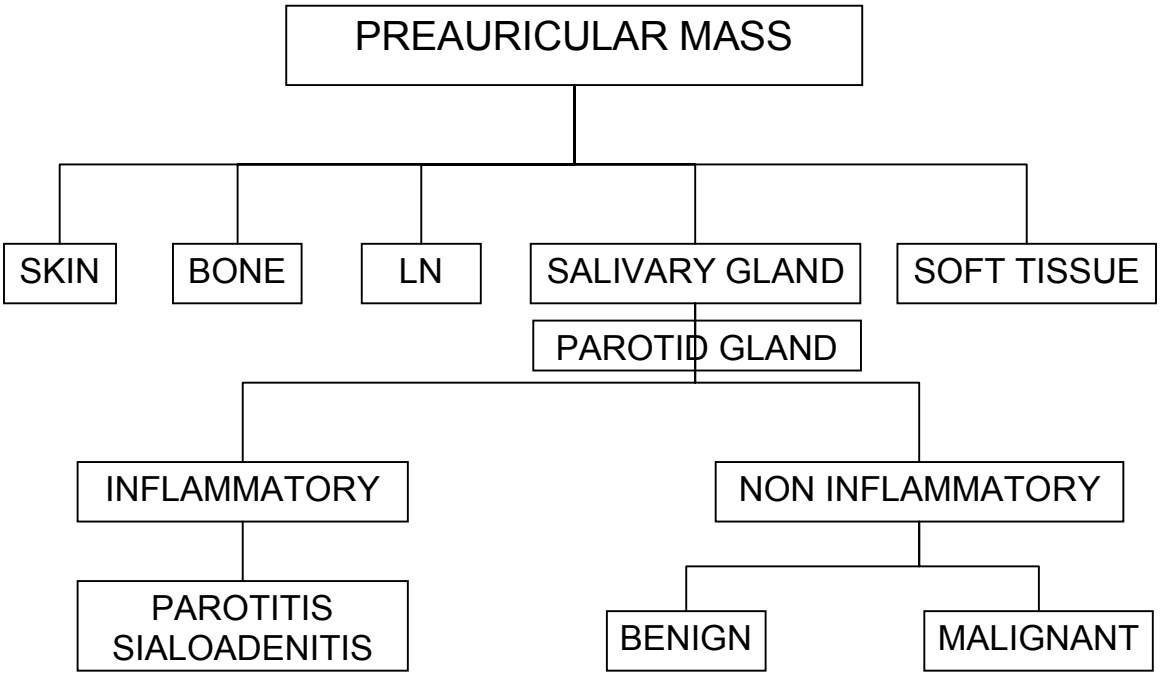
5x4 cm Preauricular mass, Right
- firm
- mobile
- nontender
- nonerythematous

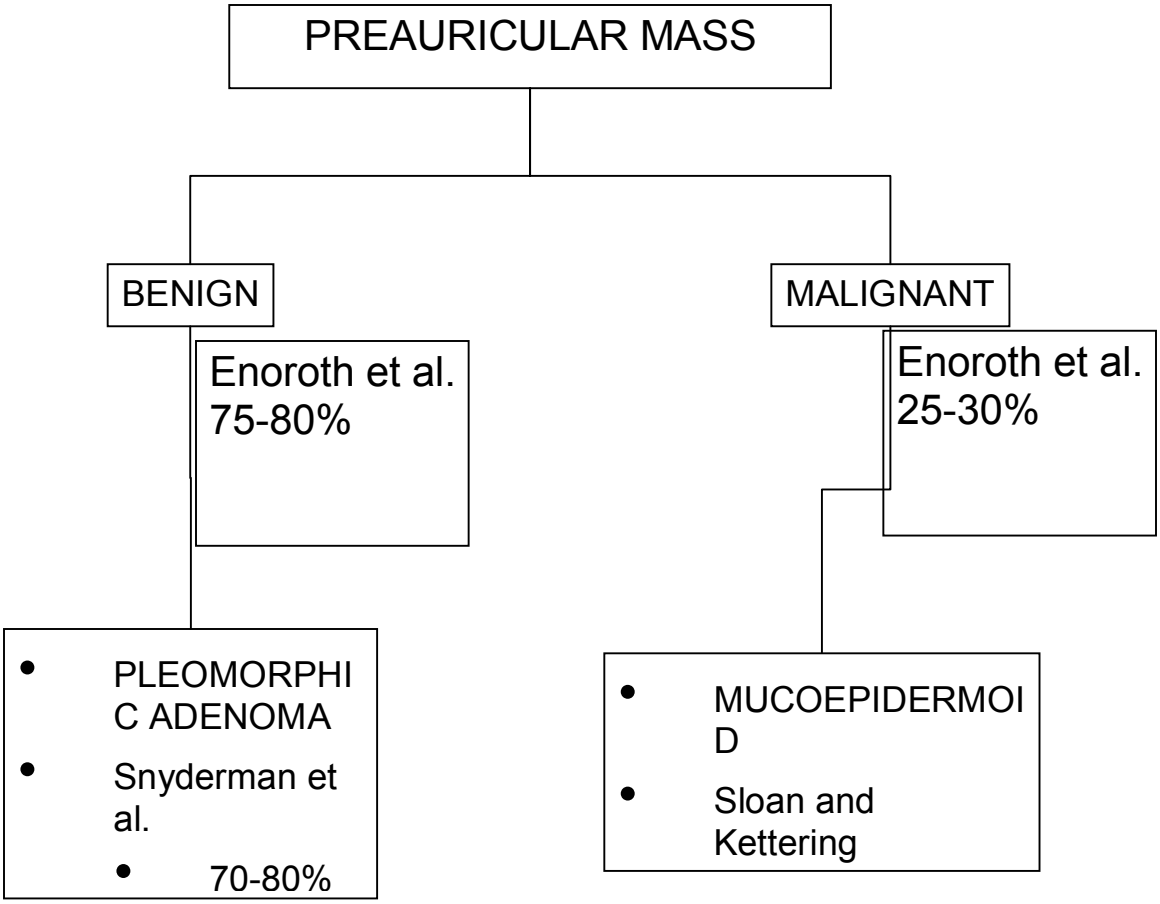
No cervical LN
Normal Intra-oral exam
No skin lesion
No Facial nerve paralysis

Chest and Lungs: Symmetrical chest expansion, no lagging, clear breath sounds.
Heart: Adynamic precordium, Normal rate, regular rhythm, no murmur.
Abdomen: Flabby, normoactive bowel sounds, no tenderness, no mass.
Extremities: grossly normal, full and equal pulses.

SALIENT FEATURES

1. 35M
2. Slowly growing, painless pre-auricular mass, Right
    - Firm
    - Mobile
    - Non-tender
    - Non-erythematous
3. No cervical lymphadenopathy
4. Normal Intra-oral exam
5. No cranial nerve deficit




PREAURICULAR MASS
BENIGN
MALIGNANT
Enoroth et al.
75-80%
Enoroth et al.
25-30%
PLEOMORPHIC ADENOMA
Snyderman et al.
70-80%
MUCOEPIDERMOID
Sloan and Kettering

CLINICAL DIAGNOSIS

1 º	Parotid Mass, Benign, probably Pleomorphic Adenoma, Right	85%	SURGICAL
2 º	Parotid mass, Malignant, probably Mucoepidermoid Carcinoma, Right	15%	SURGICAL

PARACLINICAL PROCEDURE

No

- I am quite certain of my primary diagnosis.
- The same treatment plan.

PRETREATMENT DIAGNOSIS

Parotid mass, Benign, probably Pleomorphic adenoma, Right

TREATMENT GOALS

1. Resolution of the mass
2. Prevention of complication
3. Maintenance of function

TREATMENT OPTIONS

Treatment Options	BENEFITS		RISK	COST P	AVAILABILITY
	Resolution	Recurrence	Facial nerve paralysis		
Chemotherapy	x	?	—	>15,000	/
Radiotherapy	x//	SR:70% RR:34-50%	—	>10,000	/
Enucleation	/	SR: 50% RR: 60-70%	+++	2,000	/
Superficial Parotidectomy	/	SR: 95% RR:1-5%	++	2000	/
Total Parotidectomy	/	SR:100% RR:0-2%	++	2000	/

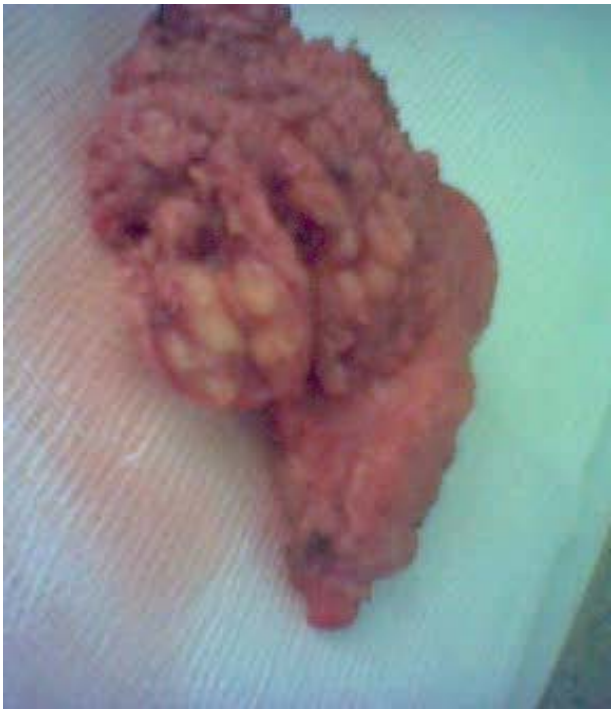
Preoperative Preparation

- Consent
- Psychological support
- Optimize patient's condition
- NPO for 6 hours
- Preparation of OR materials

TREATMENT: OPERATIVE TECHNIQUE

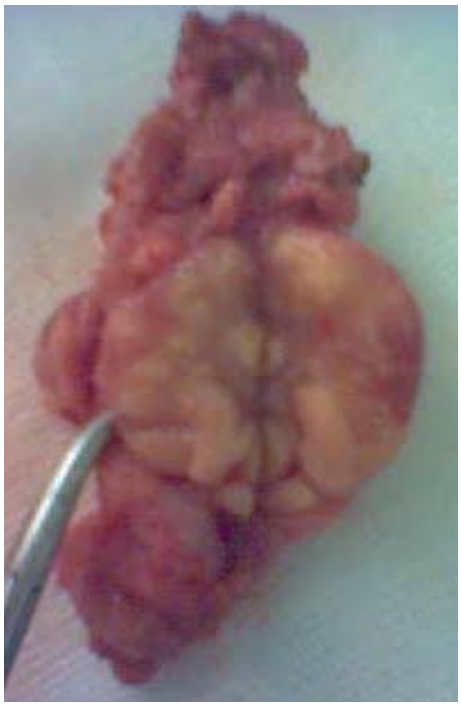
- Patient supine with neck hyperextended and turned on the right, under GA
- Asepsis/Anti-sepsis

- Sterile drapes placed
- Line of incision marked with Gentian violet, modified Blair incision using lade 15 under the preauricular crease going 2 cm from the submandibular margin.
- Posterior skin flap created, and elevated to expose 1-2 cm of underlying sternocleidomastoid muscle, avoiding not to enter the mass.
- Greater auricular nerve and facial vein identified cut and ligated.
- Anterior skin flap raised to the anterior border of the gland stopping at its anterior edge.
- Flaps sutured to the drapes
- Dissection from below going up and posteriorly towards the stylomastoid foramen.
- Intraoperative findings noted:



  - well circumscribed mass
  - measuring 2x2cm
  - superficial lobe
  - above the VII nerve

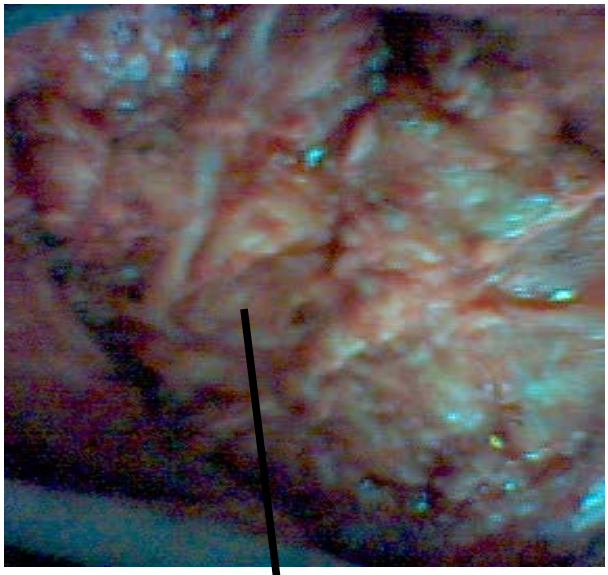
Parotid Gland



On cut surface,
mass
whitish to tan
slightly gritty

- Facial nerve identified.
- Facial nerve branches identified and dissected free from the superficial lobe.
- Dissection began from the inferior branch.
- Superficial Parotidectomy done

Parotid gland and Facial nerve



- Hemostasis
- Complete instrument and sponge count.
- Negative suction drain placed.
- Closure using vicryl 4-0.
- Dry sterile dressing.
- Patient tolerated the procedure well.

POSTOPERATIVE DIAGNOSIS:

Pleomorphic Adenoma, Parotid, Right

Operation Done:
Superficial Parotidectomy, Right

Post Operative Care

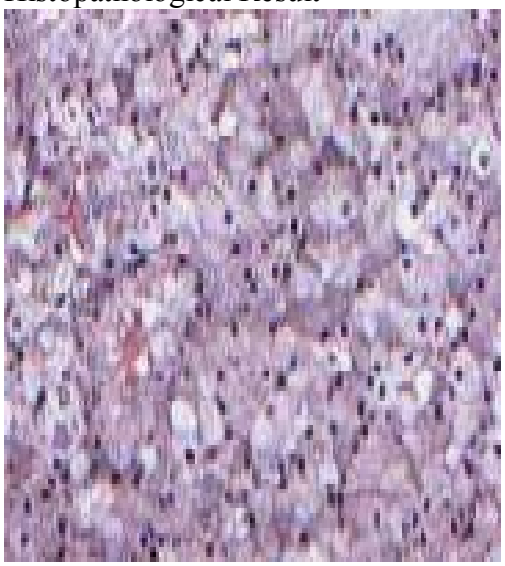
- Analgesia
- DAT
- adequate monitoring: complications and drain output
- Patient was discharged on the second post operative day
- Follow up after a week: removal of Suture and histopathological result

Histopathological Result
Acinic Cell Carcinoma,
Papillary Type, Parotid, Right

Histopathological Result

tumor composed of proliferating malignant round to polyhedral cells arranged in acinar growth exhibiting papillary-cystic pattern

Histopathological Result



Individual cells have a round nucleus, some of which are peripherally placed and have abundant basophilic cytoplasm. Occasional lymphocytes are likewise noted in the stroma

Final Diagnosis
Acinic Cell Carcinoma,
Papillary Type
Stage I (T2N0M0)
S/P Superficial Parotidectomy, Right

Follow-up Treatment Plan
Treatment goals

1. Prevent recurrence
2. Prevent complication

TREATMENT OPTIONS

Treatment Options	BENEFITS		RISK	COST P	AVAILABILITY
	Survival Rate	**Recurrence Rate**	**Facial nerve paralysis**		
Observation	80-90%7,9	45%	__	_	/
Completion Parotidectomy	85-90%7,9	40-50%5	++	2000	/
Postoperative Radiotherapy	80-90%3	42%7	__	>10000	/

Follow-up Plan

1. Surveillance general formula
- 1st post treatment: 1-3 months
- 2nd post treatment: 2-4 months
- 3rd year post treatment: 3-6 months
- 4th and 5th year: 4 -6 months
- After 5 years: 4 -6 months

2. CXR and liver enzymes as needed

Prevention and Health

- Anticipate complications
  - Adequate hemostasis
  - Avoid Recurrence
  - Avoid infection
  - Avoid dehiscence

Prevention and Health

- Alive patient
- Patient's health problem resolved

- No complaint
- No disability
- No medical suit
- Satisfied patient

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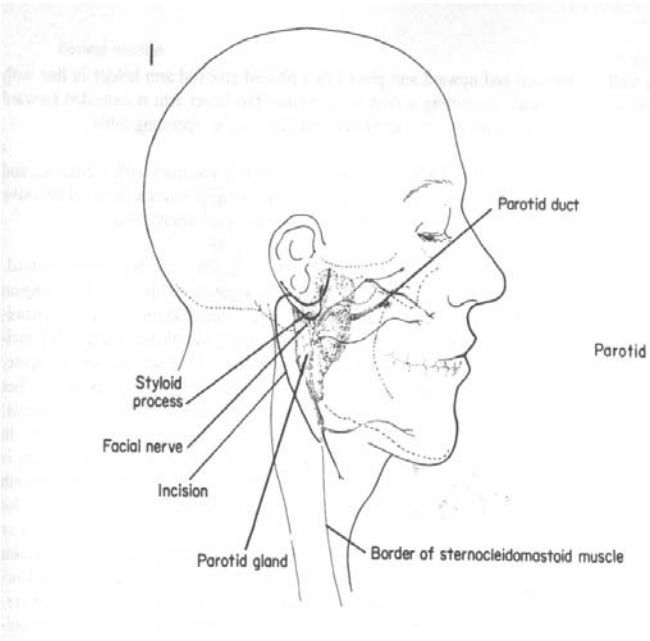
Discussion

Salivary Gland Tumors

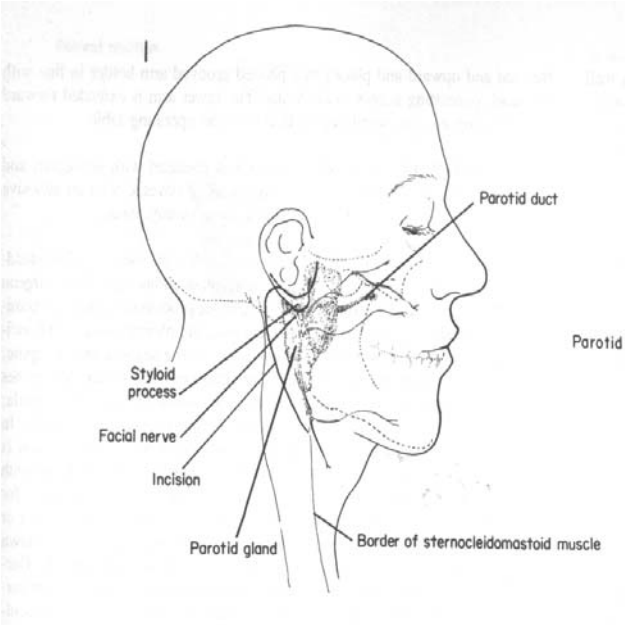
- 4 major salivary glands and thousands of minor salivary glands
- two parotid glands and two submandibular glands.
- parotid glands are found in front of the ears and extend to the area beneath the ear lobe along the lower border of the jawbone.
- Salivary glands tumors are most often found in the parotid gland.
- Generalities of Parotid Tumors
    - Seventy to eighty percent of parotid tumors are benign
    - Pleomorphic adenoma (MC). About 5 - 10% of patients with pleomorphic adenoma develop cancer
    - Warthin's tumor (2ndMC). 10% of Parotid Tumors
    - 20 - 25% of parotid tumors-malignant
    - Mucoepidermoid carcinoma (MC malignant cancer)

Anatomy



- Extends to the zygomatic process and mastoid tip of the temporal bone
- Parotid duct exits medially, pierces the buccinator and enters the bucal cavity opposite the 2nd molar.

Anatomy



- 2 lobes by facial nerve
- VII exits the cranium via stylomastoid foreamen
- LN draining to the preauricular, infraauricular, deep upper jugular nodes

Clinical Presentation

- Painless asymptomatic mass, 80%, 30% (pain)
- Facial nerve paralysis, 7-20%
- Slowly growing mass
- Trismus

- History/PE
  - focused on the onset of the mass
  - Associated SSx
  - characteristics of the mass
  - LN
- Paraclinicals
  - FNAB-cannot distinguish benign from malignant because malignancy of the parotid epithelial cells is related to the behavior of the tumor cells in relation to the tissue planes and rather than cellular architecture.

- CT, MRI

Treatment

- Subtotal, Superficial Parotidectomy
- Total Parotidectomy

Acinic Cell Cancinoma

- Acinar cell carcinoma, acinic cell adenocarcinoma, acinose carcinoma
- 1-3% of salivary gland, 95% arise in the parotid
- Intermediate-grade malignancy with low grade potential
- Serous cells, grossly encapsulated, hard, gray-white tumors.
- The tumor consists of lobules of round uniform-appearing cells with abundant cytoplasm arranged in nest
- Maybe bilateral or multicentric and is usually solid, rarely cystic.
- Rarely metastasize
- Clinically simulate pleomorphic adenoma
- 3rd and 6th decade, 2:1 Female to male
- SR 82-100% (5 yrs), 68-87%(10yrs), RR 30% after parotidectomy, 20% after RT.
- Interval of RR is 4.5
- surveillance must continue indefinitely
  - 1st year post treatment:1-3 months
  - 2nd year post treatment:2-4months
  - 3rd year post treatment:3-6 months
  - 4th and 5th year:4-6 months
  - Every 12 months
  - CXR, liver enzymes annually

Post Operative Concerns

- Parotid gland surgery is done under general anesthesia.
- An overnight stay is recommended to observe for bleeding and permit recovery from the anesthetic.
- The scar generally heals quite well.
- After surgery it is common to notice some numbness around the ear, though this lessens with time.
- There will be a slight depression of the facial contour, behind the angle of the jaw where the tumor was located.
- Because of swelling around the incision, the depression is more noticeable in the first few weeks after the operation. But it will gradually disappear.
- The greatest concern of most patients having parotid surgery is damage to the facial nerve and facial paralysis.
- Permanent weakness of the entire facial nerve or a portion of the nerve is extremely rare
- Temporary weakness of the branch or even all of the facial nerve can occur but this lasts only a few weeks or months.
- Hematoma formation
- Salivary gand fistula

- Freys syndrome

Postoperative Care

- Patients may have a drain in the operative site, which may be removed in 24 - 48 hours
- Most patients go home the same day of surgery or after 24 hours
- Skin sutures are taken out by the end of the week
- There may be some weakness of the facial muscles on the side of the surgery due to swelling of the tissues around the nerve. This usually resolves in a few days
- The prognosis (outcome prediction) of tumors of the parotid varies with the pathologic type, the size of the tumor and the spread of tumor to surrounding tissues. Most, however, have good prognoses.

TNM Classification

- Primary Tumor (T)
  - Tx 1' tumor cannot be assessed
  - T0 no evidence of 1' tumor
  - T1 <2cm without extra parenchymal extension
  - T2 2cm or less 4cm without extraparynchymal extension
  - T3 4-6cm and/or extraparenchymal extension without VII involvement
  - T4 > 6cm with invasion of the base of the skull, VII
- Regional Lymph Node (N)
  - NX Regional LN cannot be assessed
  - N0 No LN metastasis
  - N1 Ipsilateral LN, 3cm
  - N2 Single ipsilateral LN,3-6cm; multiple ipsilateral LN, none >6 cm; bilateral or contralateral LN, <6cm.
  - N3 Mets >6 cm
- Distant Metastasis (M)
  - Mx Distant mets cannot be assessed
  - M0 No distant mets
  - M1 Distant mets