

Salivary Gland Neoplasms

-minor salivary gland

-major salivary gland

❖ Major salivary glands are present in pairs.

❖ There are three major pairs of salivary glands:

- 1- Parotid,
- 2- Submandibular,
- 3- Sublingual glands.

❖ **The parotid gland is the largest.**

❖ The consistency and amount of saliva contributed by each salivary gland is different and vary this why we have three pairs of major salivary gland.

❖ They are very important because the digestion start in oral cavity.

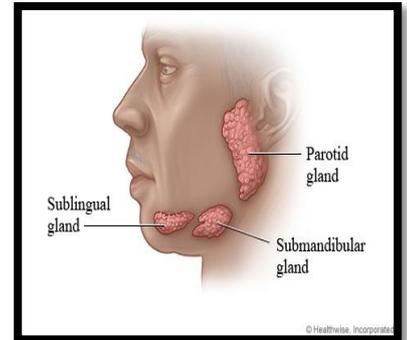
❖ Minor salivary glands are found in the oral cavity. They are most condensing at the junction between hard and soft palate. (propensity to arise at the junction of the hard and soft palates).

❖ **Parotid gland : open through a duct opposite to upper 2nd molar tooth.**

This duct called as (Stensen's duct).

➤ **Why you need to know the location of the duct?**

Because if you have **inflammatory process infection in the parotid gland** I need to establish the **presence or absence of discharge** o parotid gland then you can gently **squeeze on parotid** gland expected to see it and to **collect this secretion or this discharge opposite to 2nd upper molar tooth.**



◆ **Submandibular gland :opening on either sides of frenulum of the tongue.**

◆ **Sublingual gland :opening on floor of the mouth.**

- ✱ Most salivary gland neoplasm is affecting the parotid gland.
- ✱ Neoplasm term is general term can be either referred to benign or malignant tumors.
- ✱ Risk of malignancy depend on the type of gland are involved.
- ✱ Once talked about the parotid so 80% of parotid gland tumors are benign 😊

✱ **Submandibular → 50% benign, 50% malignant.**

✱ **Sublingual glands → is the most malignancy**

★ **The two most important benign parotid gland tumors are:**

مهمة

1- Pleomorphic adenoma

2- Monomorphic adenoma (Warthin's tumor)

◆ **Parotid gland divided by the facial nerve : to superficial part and, deep part .**

Q: what is the surface anatomy of facial nerve?

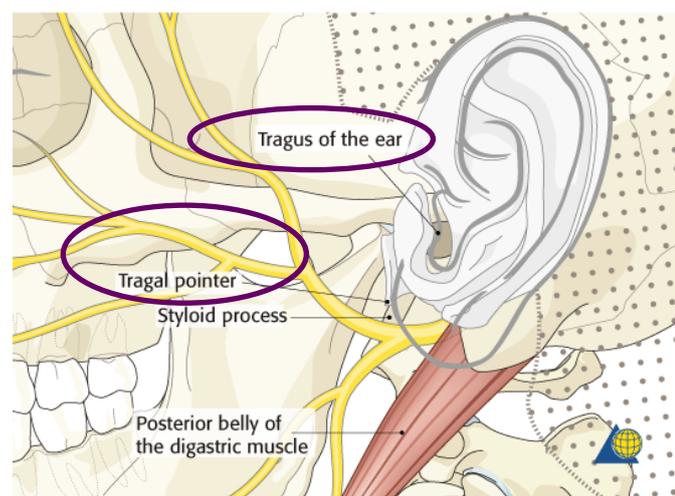
Facial nerve exist the skull between tragus / anti-tragus which there are located the (inter-tragal pointe) between the tragus and anti-tragus .

Facial nerve exit the skull and its surface anatomy

is: Inter-tragus point.

The facial nerve then passes through the parotid gland.
The main trunk gives off two 2major brunch division and the give us collectively what we call (goose foot).

-Splits into five branches innervating the muscles of facial expression (temporal, zygomatic, buccal, marginal mandibular, cervical).



*** The marginal mandibular branch is very important. Why?**

-Suppose that we have a tumor in submandibular gland, the marginal mandibular branch pass through it If you open the tissue adjacent to the lower jaw you are at risk of doing injury to the marginal mandibular branch. And if the marginal mandibular branch is injured which supplies the depressor labii. This why these is a very important anatomical point should surgeon know.

- You should be far away from marginal mandibular branch at least 2 centimeter (2cm or more) below the lower jaw of mandible.

***Must be far away 2 cm at least in order no causing damage or injury to marginal mandibular branch**

*** The type of malignancy depends on the type of gland involved.**

	Malignant	Benign	incidence
Parotid	20%	80%	80%
Submandibular	50%	50%	15%
Sublingual glands/minors G	70%	30%	5%

➤The possibility of malignancy is greater in
SUBLINGUAL or/ MINORS GLANDS TUMOR



Pleomorphic adenoma of the left parotid gland with a round, painless, rubber-like swelling over the left ramus region below the ear, covering the lower border of the mandible near the

Pleomorphic adenoma



WARTHIN TUMOR

◇ Pleomorphic adenoma and Monomorphic adenoma has certain difference. But clinically it is not always easy to distinguish between them. (you have to read the characteristics of both Pleomorphic adenoma and Monomorphic by yourself but there is few imp points we will highlight).

⊗Pleomorphic adenoma procedure → is superficial parotidectomy. = remove the superficial part above facial nerve.

⊗warthin tumor surgery procedure → is Enucleation

►Histologically Pleomorphic adenoma features:

- Consists of **Pseudopodia** (which are finger-like projections extending beyond the tumor capsule, seen in pleomorphic adenoma. **If not resected completely,** these **pseudopods** may increase the risk of **recurrence** after **excision** of pleomorphic adenoma.

☀ In Pleomorphic adenoma we do Superficial Parotidectomy , don't do Enucleation , *because if you just only remove this tumor alone the surgeon might leave or missin a little of these pseudopods and this leads to recurrence*

✿ Warthin Tumor you have two options:

Since there is no *pseudopods* they are well encapsulated:

1- Some said Enucleation.

2- Others said it is better and much safer when you do superficial parotidectomy. (In Reality it is not found that each one is better than the other. they are both same result and both are have the same outcome).

**#SO There are two options in Warthin Tumor.
And a single option in Pleomorphic adenoma.**

Question: if you have a patient with bilateral polymorphic lesion this is most likely is ?

Warthin Tumor. Because bilaterally is a characters features of warthin tumors.

Question: which one has the greater malignant potential?
Pleomorphic adenoma.

Question: a patient present to you with a parotid swelling or a parotid lesion, you perform U/S and you see this was a lesion or a mass of parotid gland how you would proceed ???

Answer: it's important to know that parotid gland 80% are benign lesions
1→ superficial parotidectomy, because the most common benign lesion of parotid is Pleomorphic adenoma procedure.

2→ others says it is better to know whether is benign or malignant so it is better to do FNA fine needle aspiration cytology.

Message to take home: that you can go through FNA FINE NEEDLE ASPIRATION ON PAROTID. BUT YOU MUST DON'T TAKE A CORE NEEDLE BIOPSY OR A TRUE CUT FROM PAROTID BECAUSE THE SEEDING OF Pseudopodia .

“Good things come to those who believe, better things come to those who are patient and the best things come to those who WORK.”

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