Salivary glands

Salivary glands :
*Major salivary glands paired: parotid , submandibular and sublingual .

*Minor salivary glands:
Soft and hard palates , gingiva and lips (all oral mucosa except the upper surface of the tongue)

When a patient comes with a problem in a salivary gland think systemically abt:

*Sialadenitis (inflammation).
*obstruction (by stones for ex) sialolithiasis
*Neoplasms

1-Sialadenitis ?
acute ? Viral(self limited,common in children, uni or bilateral and may be associated with pancreatitis,orchitis)

or bacterial(mouth dryness, common in parotid gland ,staph aureus , elderly post op).

Chronic autoimmune (sjogren syndrome, women (35-45) associated with SLE, rheumatoid arthritis and scleroderma).

2-Sialolithiasis
Stones in the ducts most commonly in the duct of submandibular salivary glands (due to the nature of the secretion)

It can cause Sialadenitis , superimposed infection and micro abscess , acinar atrophy as well as duct dilation .

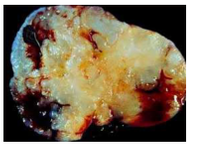
3-salivary neoplasms

#*Parotid tumors most common type of salivary tumors
Most of parotid tumors are benign
The most common type of benign parotid tumors is pleomorphic adenoma

Benign tumors of the salivary glands:

Pleomorphic adenoma

- Peak age 5th decade.
- Proliferate of many types of tissues (epi, myoepi and stroma).
- SPACESPIT slowly growing / parotid area , intraoral pharyngeal mass extending from parapharynx / mobile/firm/ irregular round to ovoid mass , well defined borders, white to tan cut surface , some times have



haemorrhage and infarcts areas

- 2-10% turn into malignant (adenocarcinoma)
- Solitary painless mass

Papillary cystadenoma lymphomatosum (warthin)

*more in males more in smokers.
*mostly unilateral
*only in parotid (indeed it can occur in all salivary glands but mostly in parotids but what is written in the slides is that it occurs only in parotids).
*cystic (may be fluctuant mass)
*Doesn't change into malignancy.
* ***variable number of cysts that excude clear fluid*** ovoid to spherical mass

Benign rare types

The suffix adenoma is found in all of these tumors(oxyphilic, oncocytic , basal, sebaceous , canalicular)

Benign nonepithelial tumors

1Hemangioma: compressible mass ,mostly in children, treatment include (steroids ,angiogram, surgery) spontaneous regression may occur .
2 Lipoma

3 Lymphangioma: cystic hygroma 50% manifest at birth ,80% by 2years.

Malignant tumors of the salivary glands

Features that differentiate malignant tumors from benign ones :
Facial nerve dysfunction, fixed to masseter , diffuse enlargement , formication.

LN mets increase with high grade mucoepidermoid & squamous cell ca but decreases with adenoid cystic acidic cell ca

#The smaller the gland the higher risk of malignancy.(60% in minor salivary glands)

Mucoepidermoid

*most common type of malignant tumors
* usually in the parotid then the palate
*peak age at 5th decade
*two types:high and low grade.

Adenoid cystic

- Most common in other glands than parotid (2nd most common in the parotid)
- Well defined not encapsulated
- LN involvement is rare

- Perineural invasion
- Reach the base of the skull
- Tendency for distant mets specially lung

Acidic cell ca

*2nd most commonly parotid paediatric ca
*Good prog

Adenocarcinoma & squamous cell ca rare & aggressive types

Evaluation

1-complete he (don't forget to ask any associated symptoms to rule out irrelevant differential diagnosis)
2- Physical examination (the mass , all salivary glands , facial nerve exam , oral exam and cervical lymph nodes).
3- rule out Sialadenitis (antibiotic trial 10 days & sialogram).
4- Radiologic evaluation (to determine disease extension CT scan and MRI).

5- Fine needle aspiration → some surgeons argue its importance
6- ttt(treatment is always surgery & tumor implantation is a problem).

Treatment
(Parotid)

Benign → superficial parotidectomy with facial nerve preservation
Malignant → total parotidectomy with nerve preservation

Note:there's a problem in the ttt of parotid problems cuz the facial nerve passes through this gland and if one branch of the facial is involved excise that branch
If LNs are involved → neck dissection and in high grade mucoepidermoid , squamous or adenocarcinoma → prophylactic neck dissection.
*chemoterapy is not effective
* external beam radiotherapy is effective.

Submandibular

Total mass excision with preservation of marginal mandibular , hypo gloss all and lingual nerves if possible. If nerves are involved should be sacrificed sometimes with platysma and skin.

Minor salivary glands

Excision (sometimes with adjacent bones hard palate for eg)

Necrotising sialometaplesia ? self limiting disease between soft and hard palate may ulcerate and mimic malignancy.