Salivary glands tumors

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What kind of tumor and what kind of surgery?
Is it a salivary gland tumor?
Is it benign or malignant?
Initial work-up
Sonography

+ Location into salivary gland vs lymph node or other
  FNAC guidance

- Only superficial parotid analysis
  Poor diagnosis accuracy
CT scan

Cancer staging
  Bone invasion
  Lymph nodes
  Distant metastases

Poor diagnosis accuracy
Poor anatomical definition
MRI

+ Best anatomical definition
  Best diagnosis accuracy

- Accessibility
  Cost
FNAC

25 Gauges
WHO classification 2017

Malignant tumours

- Acricic cell carcinoma 8550/3
- Sarcoyctic carcinoma 8502/3
- Mucopidermoid carcinoma 8430/3
- Adenocystic carcinoma 8200/3
- Polymorphous adenocarcinoma 8525/3
- Epithelial-myoepithelial carcinoma 8562/3
- Clear cell carcinoma 8310/3
- Basal cell adenocarcinoma 8147/3
- Sebaceous adenocarcinoma 8410/3
- Intraductal carcinoma 8500/2
- Cystadenocarcinoma 8440/3
- Adenocarcinoma, NOS 8140/3
- Salivary duct carcinoma 8500/3
- Myoepithelial carcinoma 8982/3
- Carcinoma ex pleomorphic adenoma 8941/3
- Carcinosarcoma 8980/3

Poorly differentiated carcinoma:
- Neuroendocrine and non-neuroendocrine 8020/3
- Undifferentiated carcinoma 8020/3
- Large cell neuroendocrine carcinoma 8013/3
- Small cell neuroendocrine carcinoma 8041/3
- Lymphoepithelial carcinoma 8082/3
- Squamous cell carcinoma 8070/3
- Oncocytic carcinoma 8290/3

Borderline tumour

- Salivary blastoma 8974/1

Benign tumours

- Pielomorphic adenoma 8940/0
- Myoepithelioma 8982/0

Basal cell adenoma 8147/0
- Warthin tumour 8561/0
- Oncocytoma 8290/0
- Lymphadenoma 8563/0
- Cystadenoma 8440/0
- Sialadenoma papilliferum 8406/0
- Ductal papillomas 8503/0
- Sebaceous adenoma 8410/0
- Canalicular adenoma and other ductal adenomas 8149/0

Other epithelial lesions

- Sclerosing polycystic adenosis
- Nodular oncocytic hyperplasia
- Lymphoepithelial lesions
- Intercalated duct hyperplasia

Soft tissue lesions

- Hertagomina 9120/0
- Lipoma/sialolipoma 8850/0
- Nodular fasciitis 8828/0

Haematolymphoid tumours

- Extracanal marginal zone lymphoma of MALT 9699/3

The morphology codes are from the International Classification of Diseases for Oncology (ICD-O) (142A). Behaviour is coded /0 for benign tumours; /1 for unspecified, borderline, or uncertain behaviour; /2 for carcinoma in situ and grade III intraepithelial neoplasia; and /3 for malignant tumours. The classification is modified from the previous WHO classification, taking into account changes in our understanding of these lesions. *These new codes were approved by the IARC/WHO Committee for ICD-O. **Grading according to the 2013 WHO Classification of Tumours of Soft Tissue and Bone.
Objectives of preoperative evaluation

• To avoid unnecessary surgery (infective or non-neoplastic masses, lymphoma, unresectable tumour
• To do appropriate surgery
• To avoid embarking on surgery that is beyond the scope of a surgeon e.g. deep lobe tumour, tumour extending to parapharyngeal space, tumour requiring neck dissection, or tumour requiring facial nerve reconstruction

https://developingworldheadandneckcancerguidelines.com/afhns-guidelines
Imaging in poorly resourced settings?

• Minority of parotid tumours require imaging
  – Only required if it might change management
  – Infrequently indicated for clinically benign, mobile parotid tumours as it rarely alters surgical management

• Indications
  – Deep lobe / extension to parapharyngeal space
  – Fixed tumor, invasion of local structures
  – Neurological deficits
  – Cancer staging

https://developingworldheadandneckcancerguidelines.com/afhns-guidelines
Parapharyngeal space extension
Local spread / recurrence
Perineural spread: adenoid cystic carcinoma
Surgery
Frozen section
Surgical margins
Clear margins?
Pleiomorphic adenoma (parotid gland)
Pleiomorphic adenoma (parotid gland)
Pleiomorphic adenoma (parotid gland)
Pleiomorphic adenoma (submandibular gland)
Parapharyngeal space tumors
Preoperative cancer work-up!
Cancer (parotid gland)

Total parotidectomy
Radical or not (facial nerve preservation when possible)
Lymph node dissection
Cancer (submandibular gland)

Submandibular gland excision
Lymph node dissection
Nerves management (cancer)

Facial nerve preservation whenever possible, neuromonitoring

Nerve graft must be anticipated

Patient information++
Beware of perineural spread!
Radical surgery + reconstruction
Radical surgery + reconstruction
Lymph node dissection (cancer)

cN0 : levels (I)-II - III

cN+ : levels I - V
Postoperative radiotherapy (PORT)

• High grade tumors
• T3-T4 stages
• Positive lymph nodes
• Positive margins or close margins
• Recurrence (if no previous RT)

• Chemotherapy?

http://refcor.org/
Surgical approach (parotid gland)
Skin incision

Lazy-S ++
Face lift
Skin incision
SMAS flap?

Yes

No

No
Facial nerve dissection
Facial nerve trunk

Stylomastoid foramen

Landmarks

Posterior belly of the digastric muscle
Cartilage pointer
Tympanomastoid suture line
Prograde dissection
Retrograde dissection
Key points
Salivary glands tumors

2/3 of cancers have a benign clinical presentation

Preoperative work-up if possible
  Imaging
  FNAC

Frozen section
Surgery

Parotid gland

Partial parotidectomy: Benign tumors (Warthin and small pleiomorphic adenomas) ...SMAS flap, face lift incision

Total parotidectomy: Malignant and large pleiomorphic adenomas

Submandibular gland

Submandibular gland excision

+/- systematic level I removal
Surgery

If no previous work-up and no frozen section:
- Systematic total parotidectomy?
- Management of lymph nodes?

If no access to Postoperative radiotherapy?
- Radical surgery?
- Consider resecting nerves adherent to a malignant tumour?
- Consider who not to offer surgery for advanced tumours when outcomes without PORT will be poor

Discussion is open!
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Facial nerve dissection

Techniques de recherche du nerf facial lors des parotidectomies

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