Salivary gland tumors

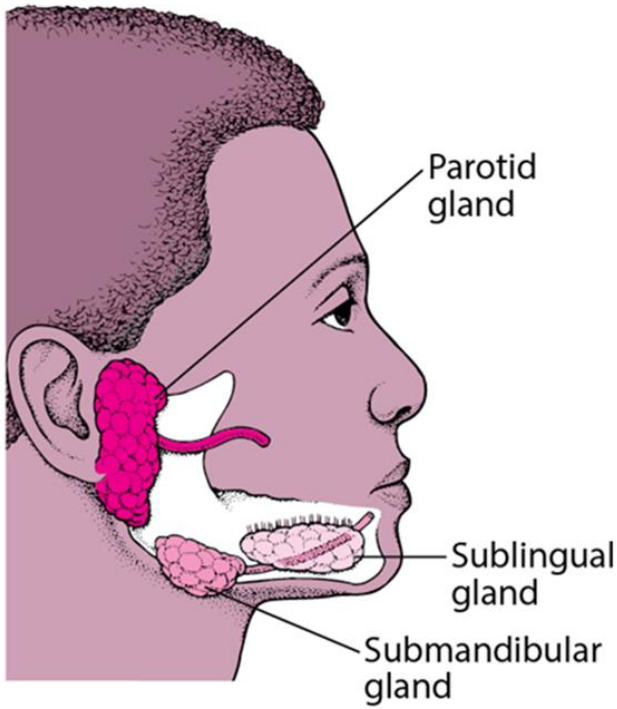
Salivary Glands

There are four main salivary glands

- Two submandibular glands
- Two parotid glands

There are multiple minor salivary glands

- Two sublingual glands
- Other



Classification

Epithelial tumors

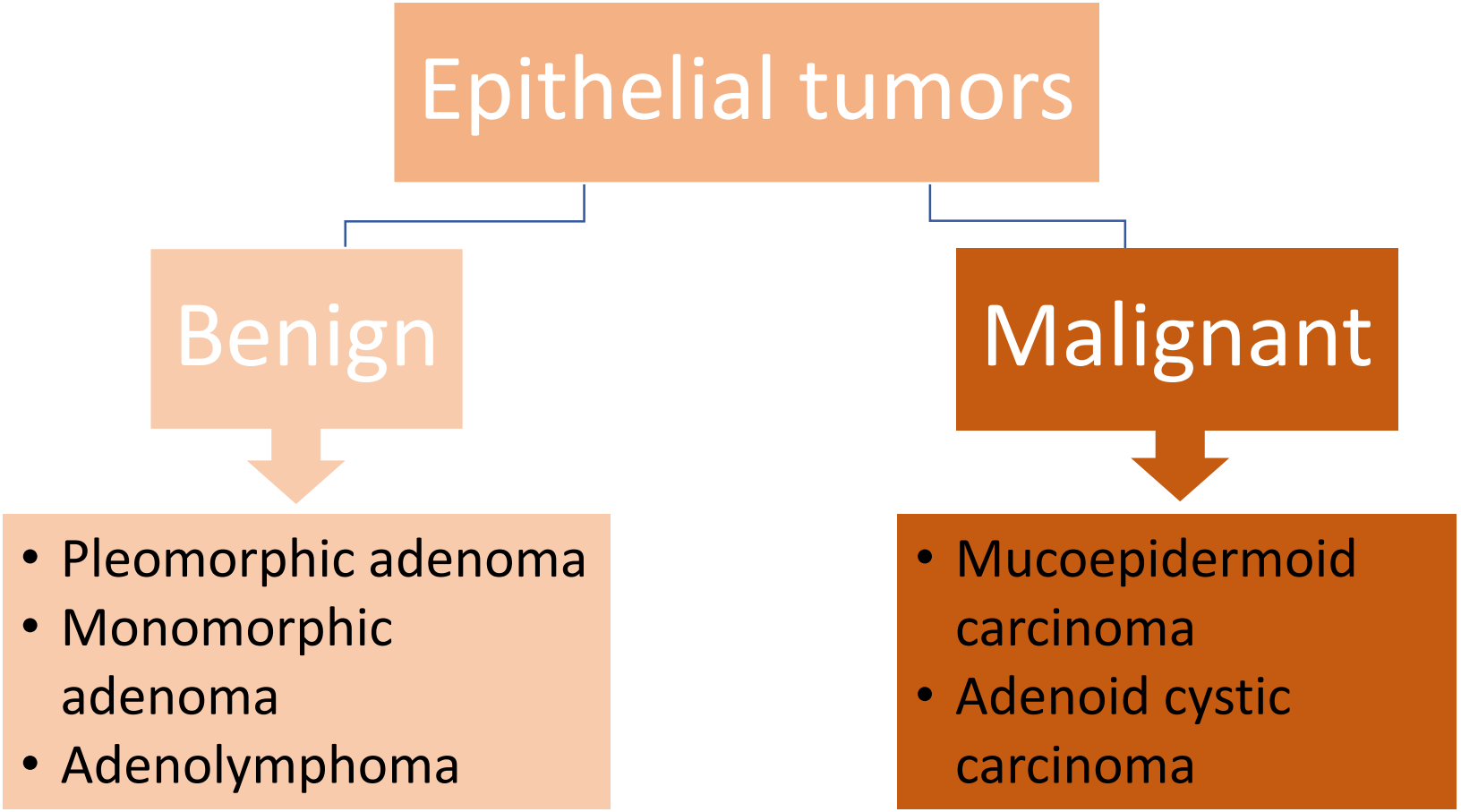
- **Benign tumors**
- **Malignant tumors**

Non epithelial tumors

- **Haemangioma**
- **Lymphangioma**

Malignant lymphomas

- **Non Hodgkins lymphoma**


Epithelial tumors
Benign
Malignant
• Pleomorphic adenoma
• Monomorphic adenoma
• Adenolymphoma
• Mucoepidermoid carcinoma
• Adenoid cystic carcinoma

Classification

Parotid gland tumors- 80%

Submandibular gland tumors- 15%

Minor salivary gland tumors- 5%

Parotid gland tumors

- Most common site for salivary tumors
- Tumors of superficial lobe -Present as slow growing painless swellings below the ear, in front of the ear or in the upper aspect of the neck
- Accessory lobe tumors- Persistent swellings within the cheek
- Rarely tumors from the deep lobe

- 80%-90% are benign
- 80% from benign are pleomorphic adenoma

- Malignant tumors
  1. Low grade malignant tumors
  2. High grade malignant tumors

Submandibular gland tumors

- Uncommon
- Present as a slow-growing, painless swelling within the submandibular triangle
- 50% of submandibular gland tumors are benign

Sublingual gland tumors

- Extremely rare
- 85% are malignant
- Present as a hard or firm painless swelling in the floor of the mouth

Minor salivary gland tumors

- Histologically similar to those of major glands
- 90% of minor salivary gland tumors are malignant
- Benign -painless, firm, slow-growing swellings
- Malignant - firm consistency, and the overlying mucosa may have a varied discoloration from pink to blue or black
- Common sites -upper lip, palate and retromolar regions

Mucoepidermoid tumors

- Most commonly occurring malignant neoplasm of the parotid gland
- Second most common malignant neoplasm of the submandibular gland
- Contain two types of cells- mucous and epidermoid cells
  - ✓ Low grade
  - ✓ Intermediate grade
  - ✓ High grade

Clinical features of Malignant Salivary Tumours

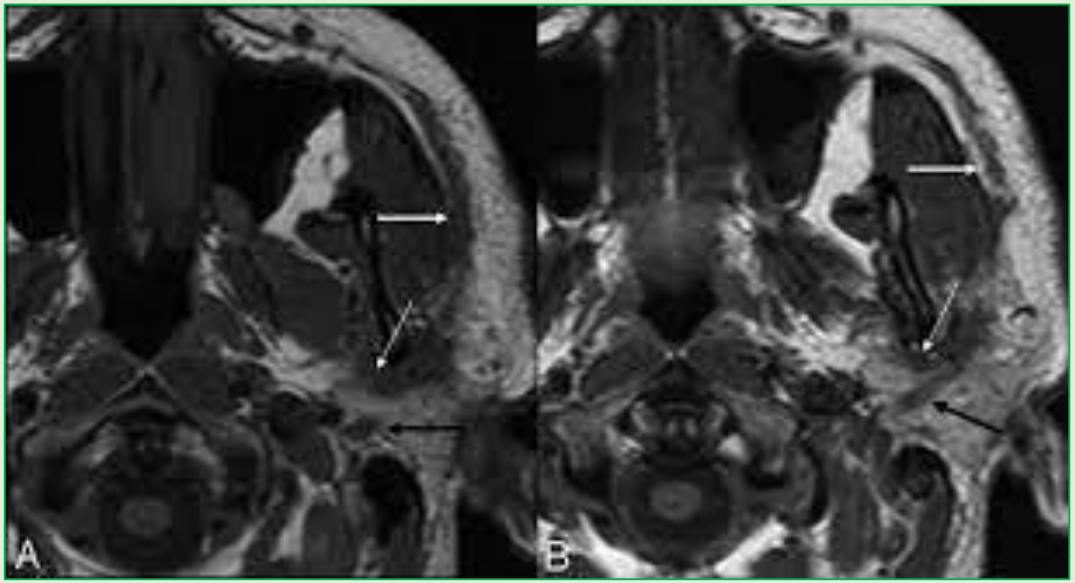
- Facial nerve weakness
- Rapid enlargement of the swelling
- Induration and/or ulceration of the overlying skin
- Cervical node enlargement

Pleomorphic adenoma

- The most common salivary gland tumor
- 60% of parotid tumors
- 36% of submandibular tumors
- Slow growing
- Smooth, multilobular, and encapsulated

Investigations

- CT
- MRI
- FNAC



- **Open surgical biopsy is contraindicated**

Treatment

Parotid gland

- **Tumors in superficial lobe -** Superficial parotidectomy
- **High grade malignant tumors -** Radical parotidectomy
- **Low-grade malignant tumors -** Superficial parotidectomy

Complications of parotid gland surgery

- Haematoma formation
- Infection
- Temporary facial nerve weakness
- Transection of the facial nerve and permanent facial weakness
- Sialocoele
- Facial numbness
- Permanent numbness of the ear lobe associated with great auricular nerve transection
- Frey's syndrome

Submandibular gland

- **Small tumors-** Intracapsular submandibular gland excision
- **Large benign tumors-** Suprahyoid neck dissection, preserving the marginal mandibular branch of the facial nerve, lingual nerve and hypoglossal nerves
- **Malignant tumors-** Modified neck dissection or radical neck dissection

Sublingual gland tumor

- Wide excision involving the overlying mucosa
- Simultaneous neck dissection
- Immediate reconstruction of the intraoral defect

Minor salivary gland

- **Tumors of the upper lip -** Excision to include the overlying mucosa

- **Tumors of the palate**

  Less than 1 cm in diameter - Excisional Biopsy

  Greater than 1 cm in diameter- Incisional Biopsy

- **Malignant -** wide excision which may involve partial or total maxillectomy.

Prognosis (malignant tumors)

Survival rates for the various tumor stages

- **Stage I - 97%**
- **Stage II - 81%**
- **Stage III - 56%**
- **Stage IV - 15%**

- **Low-grade tumors -** 10-year survival rates of 80-95%
- **High-grade tumors-** 10-year survival rates of 25-50%

- **Low-grade tumors -** Acinic cell carcinoma

  Low-grade mucoepidermoid carcinoma
- **High-grade tumors -** Adenoid cystic carcinoma

  High-grade mucoepidermoid carcinoma
  - Squamous cell carcinoma
  - Adenocarcinoma