Histological Classification of Salivary Gland Tumors

1) ***Adenomas***

   a. Pleomorphic Adenoma
   b. Myoepithelioma
   c. Basal cell Adenoma
   d. Warthin's Tumor (Adenolymphoma)
   e. Oncocytoma (Oncocytic Adenoma)
   f. Canalicular Adenoma
   g. Sebaceous Adenoma

h. Ductal Papilloma :

a. Inverted Ductal Papilloma
b. Intraductal Papilloma
c. Sialadenoma Papilleferum

i. Cystadenoma

a. Papillary cystadenoma
b. Mucinous Cystadenoma

2) ***Carcinomas***

a. Acinic cell carcinoma

b. Mucoepidermoid carcinoma

c. Adenoid cystic carcinoma

d. Polymorphous low grade adenocarcinoma
(Terminal duct Adenocarcinoma)

e. Epithelial myoepithelial carcinoma

f. Basal cell adenocarcinoma

g. Sebaceous carcinoma

h. Papillary Cystadenocarcinoma

i. Mucinous Cystadenocarcinoma

j. Oncocytic Carcinoma

k. Salivary duct Carcinoma

l. Adenocarcinoma

m. Malignant myoepithelioma (Myoepithelial carcinoma)

n. Carcinoma in pleomorphic adenoma (Malignant mixed tumor)

o. Squamous cell carcinoma

p. Small cell carcinoma

q. Undifferentiated carcinoma

r. Other carcinomas

3) Non Epithelial Tumors

4) Malignant Lymphomas

5) Secondary Tumors

6) Unclassified Tumors

7) Tumor Like Lesions:

a. Sialadenosis
b. Oncocytosis
c. Necrotizing Sialometaplasia
d. Benign Lymphoepithelial tumors
e. Salivary Gland cyst
f. Chronic sclerosing sialadenitis of submandibular gland (Kuttner tumor)
g. Cystic Lymphoid hyperplasia in AIDS

Pleomorphic Adenoma (Benign Mixed Tumor)

- Most common
- 53-77% - Parotid gland
- 44- 68% - Submandibular gland
- 38- 43% - Minor glands
- Derived from a mixture of ductal and myoepithelial elements

- That is reserve cells in intercalated duct
- Intercalated duct reserve cell differentiate into ductal and myoepithelial cell
- Myoepithelial cell can undergo mesenchymal metaplasia and gives rise to morphologic diversity of this tumor
- Not truly a mixed neoplasm

Clinical Features

- Parotid gland is most common site
- 4^{th} to 6^{th} decade ,female predilection i.e. 6:4
- Also common in young adults, children.
- Small, painless quiescent nodule
- Slowly grow and increase in size
- Sometimes show intermittent growth

- Do not show fixation to deeper tissue or the overlying skin
- It is an irregular nodular lesion that is firm in consistency.
- Areas of cystic degeneration may be palpated if superficial.
- Skin seldom ulcerates.
- Pain is not a common symptom.
- Local discomfort is frequently present

- Most pleomorphic adenomas of parotid gland occur in the superficial lobe
- It presents as a swelling overlying the mandibular ramous in front of ear
- Facial palsy in rare
- Tumor initially is mobile, but becomes less mobile as it grows larger

- ***Intraoral Tumors***
- < 1- 2 cm in diameter
- Palate is the most common site for minor gland followed by upper lip and buccal mucosa
- Causes difficulty in mastication, talking and breathing
- Palatal Tumors – on posterior lateral aspect
- Present as smooth surfaced, dome shaped mass
- If traumatized – ulcerates
- Appear fixed to underlying bone but is noninvasive

- ***Histopathology***

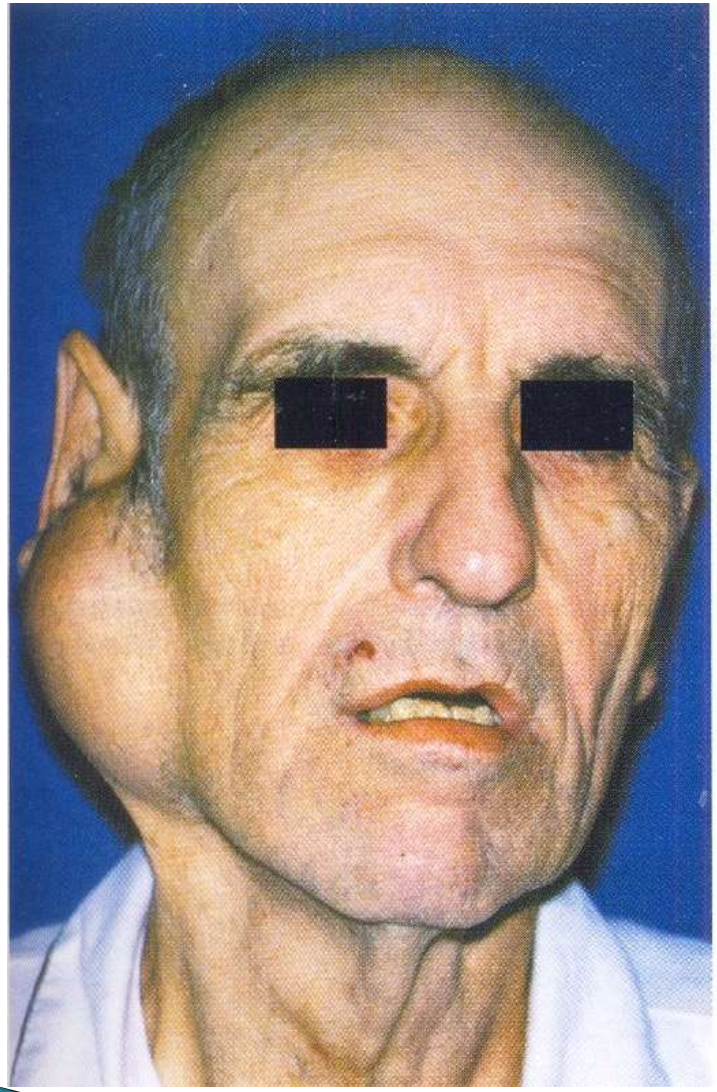
- Well circumscribed encapsulated tumor
- Capsule may be incomplete/ show infiltration
- Commonly seen in minor gland tumors
- tumor is composed of mixture of glandular epithelium and myoepithelial cells in mesenchyme like background

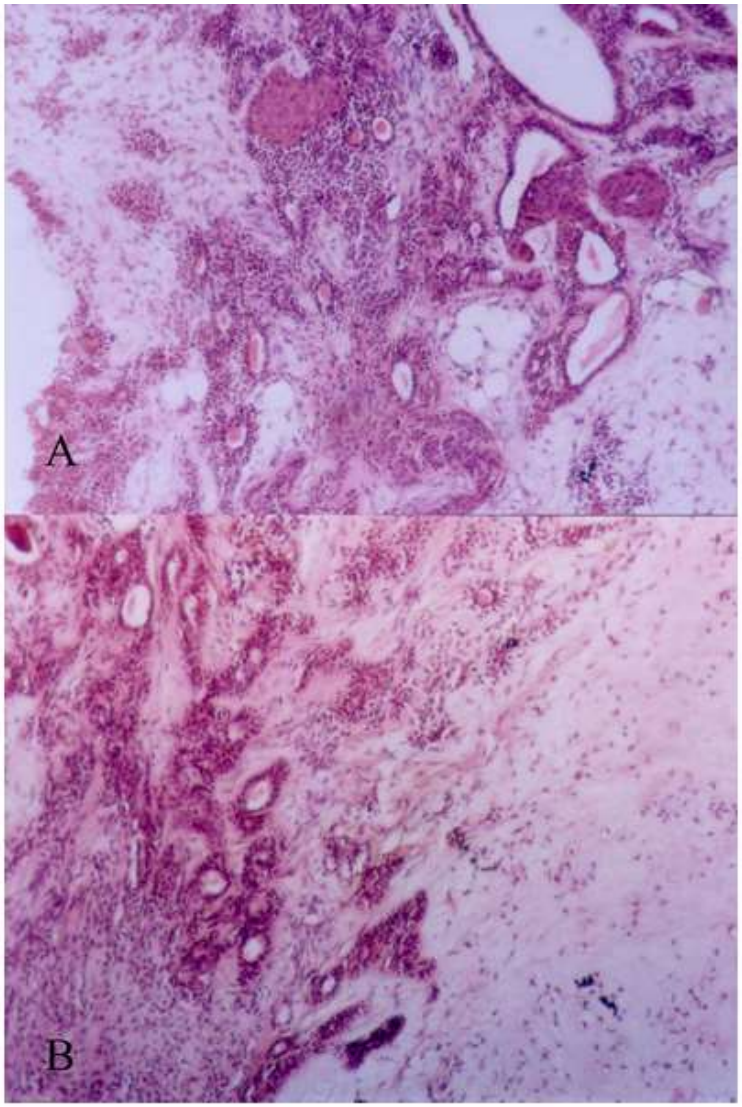
- The epithelium often forms ducts and cystic structures or may from islands or sheets of cell.
- Keratinizing sq. cells i.e. mucous producing cells can also be seen.
- Myoepithelial Cells – Present in large number
- Have variable morphology – angular/ Spindle

- Some are rounded ; eccentric nucleus and hyalinized eosinophilic cytoplasm; resembling plasma cell.
- Characteristically; plasmacytoid appearance of myoepithelial cell is seen in minor gland tumors.
- Stromal change is produced by the myoepithelial cells.
- Collection of mucoid material in tumor cells result in myxomatous background

- Vacuolar degeneration of cells produce chondroid appearance.
- At places eosinophilic hyalinized change
- At times, fibrous, fat or osteoid is seen
- Presence of entirely myoepithelial cell as myoepitheliomas

Benign Salivary Gland Tumors





PLEOMORPHIC ADENOMA

Figure 3-6. Pleomorphic adenoma.Neoplastic cells are seen arranged in ductal pattern sheets and islands. Stroma is delicately collagenous with myxoid areas. Few cells show vacuolar degeneration and are chondroid in appearance. Pg.-316

- ***Treatment***

- Surgical Excision
- In Parotid – The tumor and involved lobe of the gland is removed.
- Submax gland tumors are treated by removal of gland and tumor in continuity
- Intraoral – by extracapsular excision
- Palatal tumor- excised overlying mucosa
- Lining mucosa enucleation/ extracapsular excision