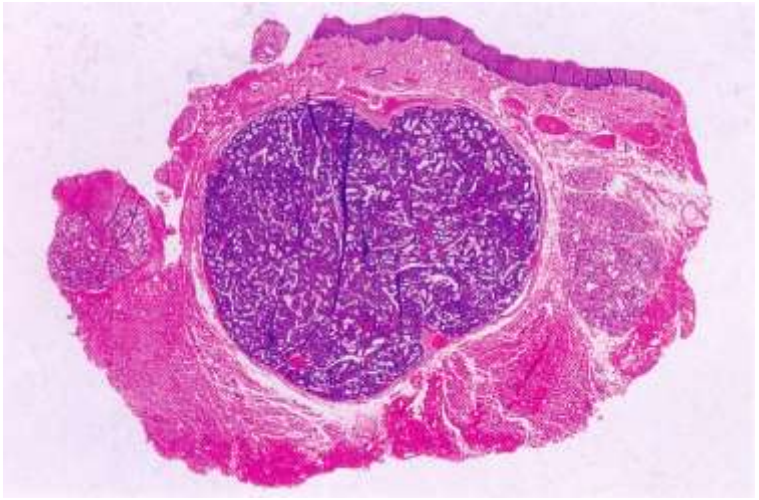
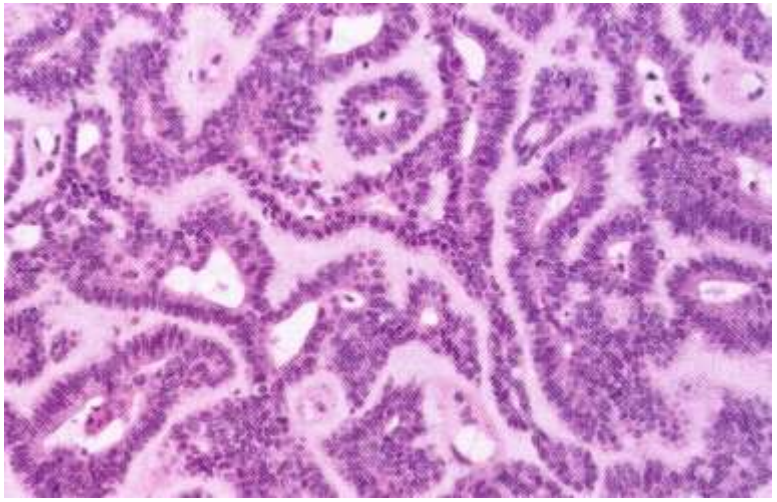
- ***Canalicular Adenoma***
- Distinctive variant of the monomorphic adenoma
- ***Clinical Features***
- Primarily in intraoral accessory salivary glands i.e. upper lip.
- Slowly growing well circumscribed, firm nodule
- Not fixed.

Histopathology

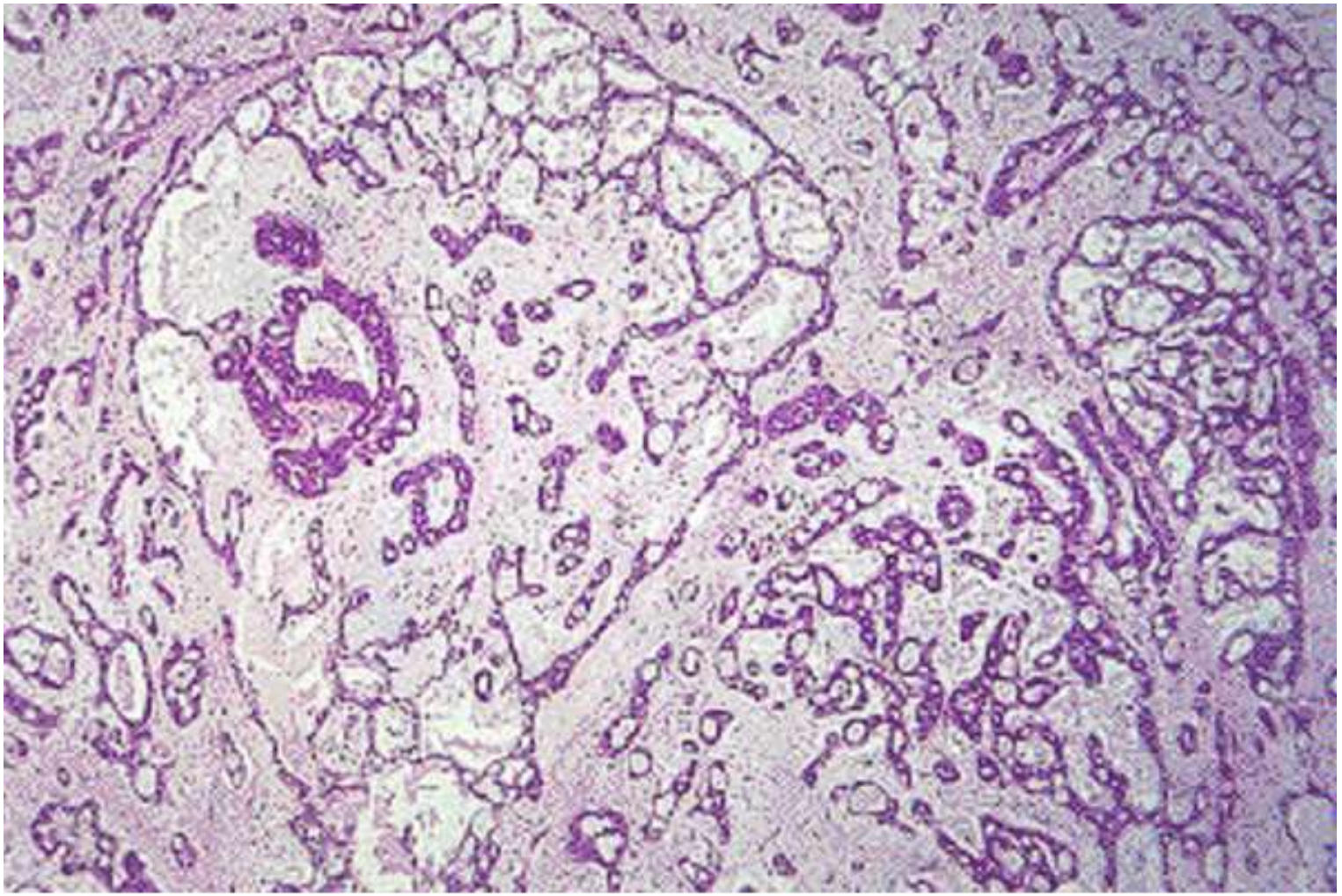




- Strikingly characteristic
- Long strands or cords of epithelial cells
- Arranged in double row; showing a ‘party wall’
- Sometimes show cystic space; enclosed by these cords.
- Cystic spaces are filled with eosinophilic coagulum.

- Supporting stroma is loose and fibrillar, delicate vascularity
- Frequently mistaken for adenoid cystic carcinoma But ACC is rarely on upper lip and not freely movable
- Tall columnar and small basal cells closely resemble salivary gland excretory duct.
- Also basal lamina is not multilayered as it is observed in ACC.

- ***Treatment and Prognosis***
- Simple surgical excision.
- Recurrence is rare.



CANALICULAR ADENOMA

Figure 3-16. Canalicular adenoma.The tumor shows single rows of cells that are arranged in parallel lines which form long lumina that have a canalicular appearance- P- 323

- ***Warthin's Tumor***
- ***(Papillary Cystadenoma Lymphomatosum)***
- Benign neoplasm
- Almost exclusively in the parotid gland occasionally submaxillary
- Less common than pleomorphic adenoma.
- Also K/as adenolymphoma

- ***Histogenesis***
- Numerous theories are put forward
- Proliferation of salivary gland ductal epithelium that is associated with secondary formation of lymphoid tissue
- Tumor arises in salivary gland tissue entrapped within paraparotid or intraparotid lymph node during embryogenesis

- Allegra suggested:- warthins tumors is a delayed hyper sensitivity disease.
- Lymphocytes are immune response to oncocytic change occurring in salivary duct.
- Smoker have an 8 fold greater risk for warthin’s tumor than to nonsmokers
- Epstein- Barr virus also implicated in the pathogenesis

- ***Clinical Features***

- Slow growing, painless, nodular mass of parotid gland.

- Firm/ Fluctuant to palpation.

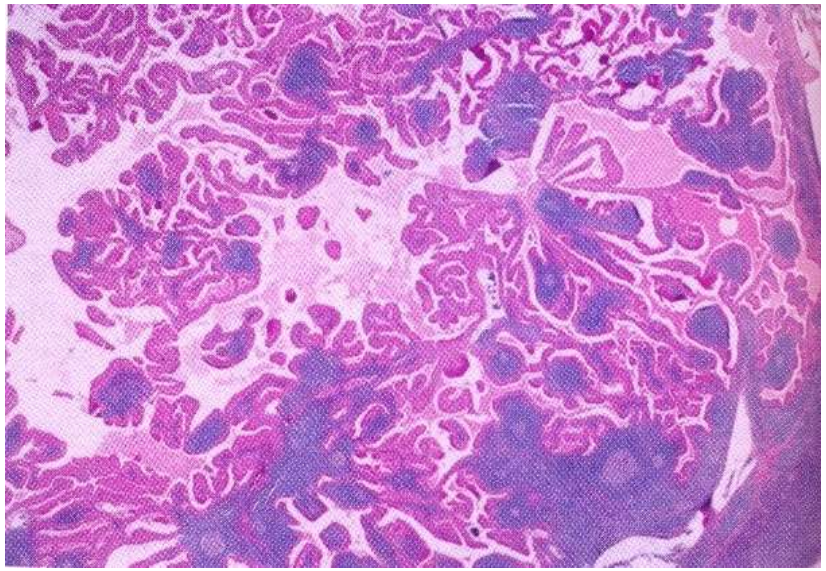
- Most frequently occur in the tail of parotid near the angle of the mandible.

- Does not exceed 3-4 cm in diameter.

- **It occur bilaterally :-** A unique feature of warthin's tumor

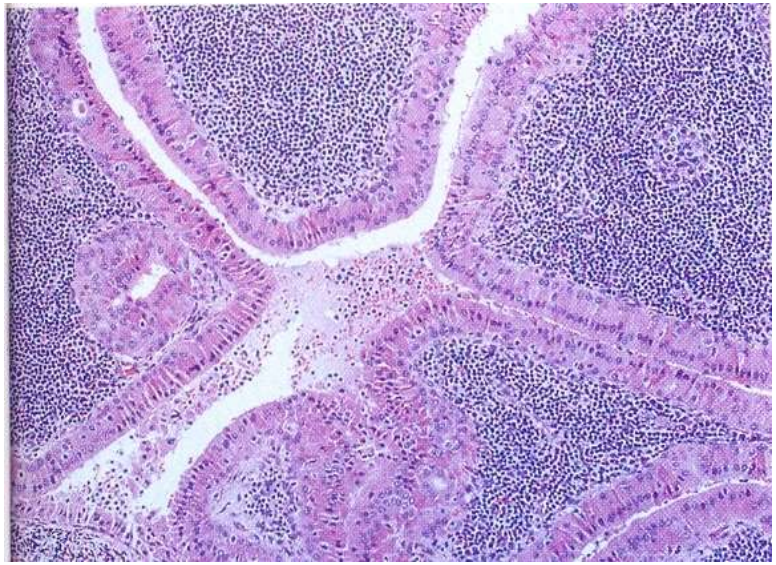
- These bilateral tumors do not occur simultaneously. But occur at different times.
- Older adults peak prevalence in 6^{th} and 7^{th} decade of life
- Male predilection.

Histopathology

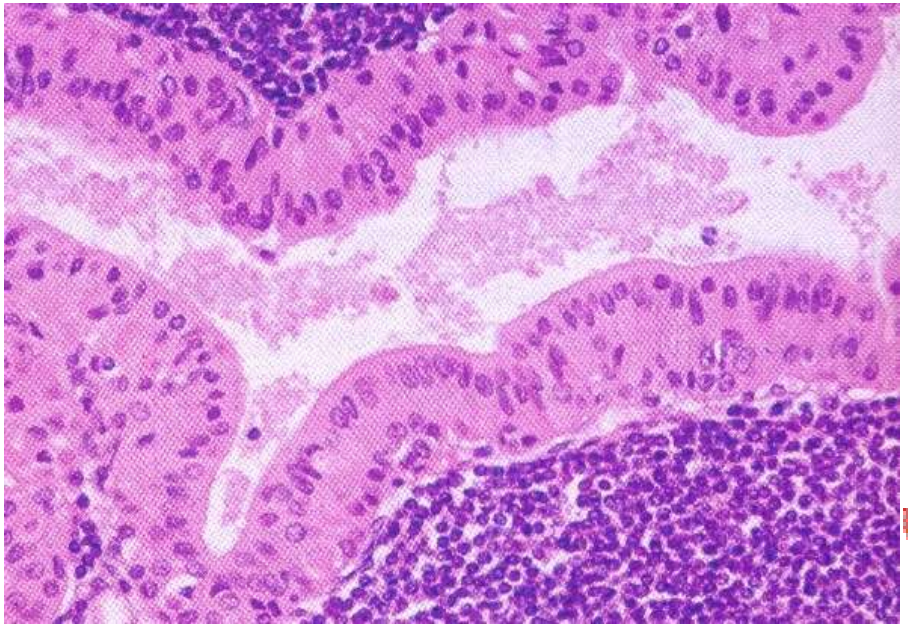


Made up of two components

- Epithelial
- Lymphoid tissue
- The lesion is an adenoma exhibiting cyst formation with papillary projections into the cystic spaces & lymphoid matrix showing germinal centers.



- The epithelial cells covering the papillary projections are columnar or cuboidal, arranged in two rows.
- Inner layer may be several cells thick.
- The lining epithelium have multiple papillary infoldings protruding in cystic spaces.



- These cells have abundant, finely granular eosinophilic cystoplasm, hyperchromatic nucleus and many mitochondria. The nucleus is centrally placed and palisaded.
- Beneath these is a second layer of cuboidal or polygonal cells. Nuclei are more vesicular.

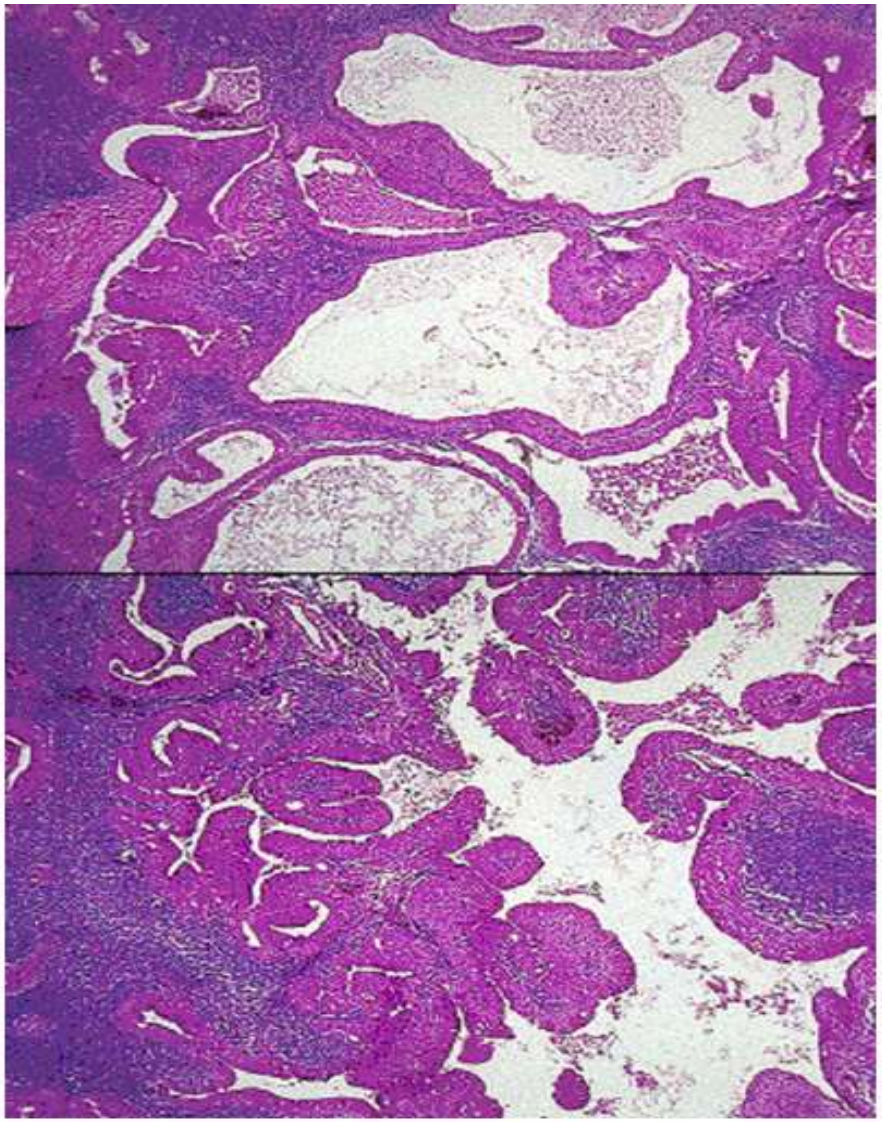
- Epithelium is supported by a lymphoid stroma, frequently showing germinal center formation.
- Eosinophilic coagulum is frequently present within the cystic spaces. It appear as chocolate coloured fluid in the gross specimen.

- ***Treatment and Prognosis***

  Surgical removal is the treatment of choice

  Tumor is well encapsulated

  Malignant transformation is rare.



WARTHIN'S TUMOR

(Papillary cystadenoma lymphomatosum,adenolymphoma)

Figure 3-11. Warthin's tumor.

Figure shows cystic spaces partially filled with homogenous fluid circumscribed by double rows of oncocytes having a stroma richly infiltrated by lymphoid tissue- P- 320

- ***Oxyphilic Adenoma***
- Rare
- Common in parotid gland
- Remains small in size
- Tumor of large epithelial cells k/as oncocytes. These cells appear normal found in a great number of location i.e. salivary gland, resp. tract, breast, thyroid etc.
- These cells are predominantly seen in ductal lining in elderly.
- Electron microscop study show that cytoplasm of oncocyte is packed by mitochondria.

- ***Clinical Features***
- Older adults
- 8th decade of life
- Firm, slow growing, painless mass.
- Rarely more than 4cm in diameter.

- ***Histopathology***

➢ Well circumscribed tumor.

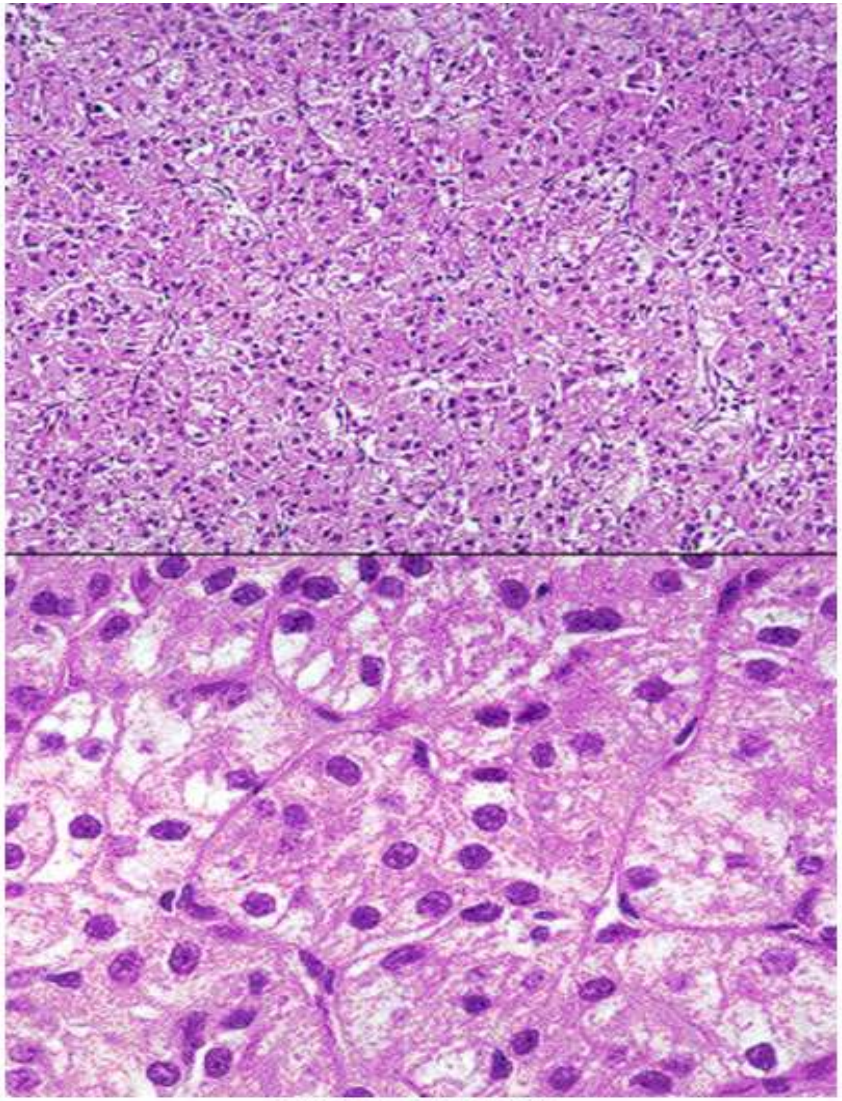
➢ Composed of large polyhedral cells; in sheets

➢ Granular, eosinophilic cytoplasm.

- Cells form an alveolar or glandular pattern.
- Nucleus, centrally placed
- Little stroma.
- Lymphoid tissue is present.

- ***Treatment***

- Surgical excision
- Does not recur



ONCOCYTOMA

(Oncocytic adenoma, oxyphilic adenoma,acidophilic adenoma)

Figure 3-14. Oncocytoma alveolar pattern.
Illustrated by clusters of oncocytes that are supported by thin, fibrous connective tissue septa and small blood vessels. Note oncocytes have clear cytoplasm that is interspersed with cytoplasmic granularity-P- 322

- ***Myoepithelioma***

➢ An Uncommon

➢ I/O Palate E/O parotid gland.

- ***Histopathology***

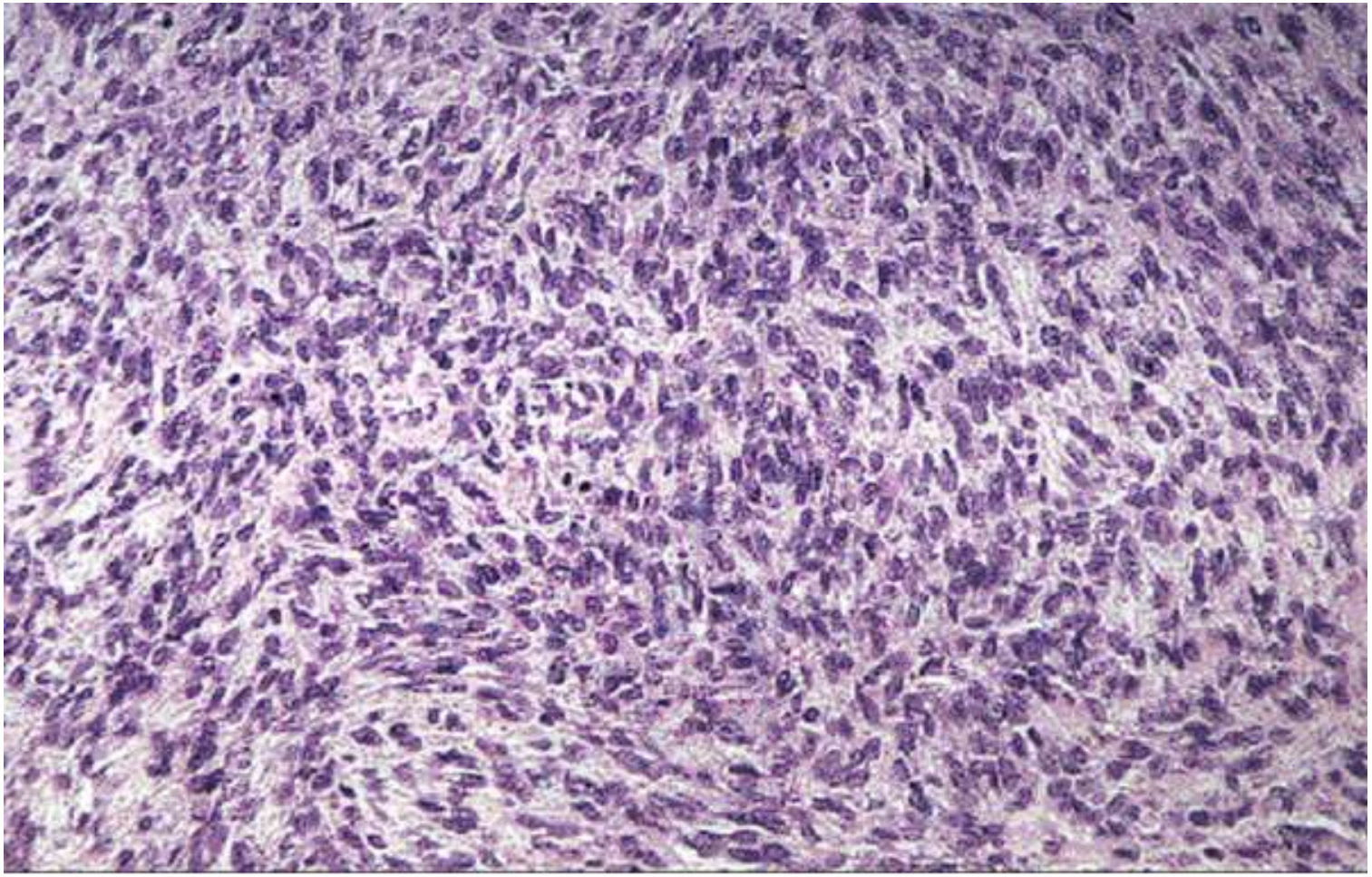
➢ Spindle shaped / plasmacytoid cell / combination

➢ Myxomatous stroma scanty to copious

- Definitive - Ultra structural study based.
- Myoepithelial cell exihibit basal lamina and fine intracytoplasmic myofilaments.

- ***Treatment***

- Surgical excision



MYOEPITHELIOMA

(Myoepithelial adenoma) Figure 3-7. Myoepithelioma composed of spindle shaped myoepithelial cells- P-317

- ***Ductal Popillomas***
- Arise from excretory ducts of major and minor salivary glands.
- **3 forms**:
- Simple ductal papilloma
- Inverted ductal papilloma
- Sialadenoma papilliferum