

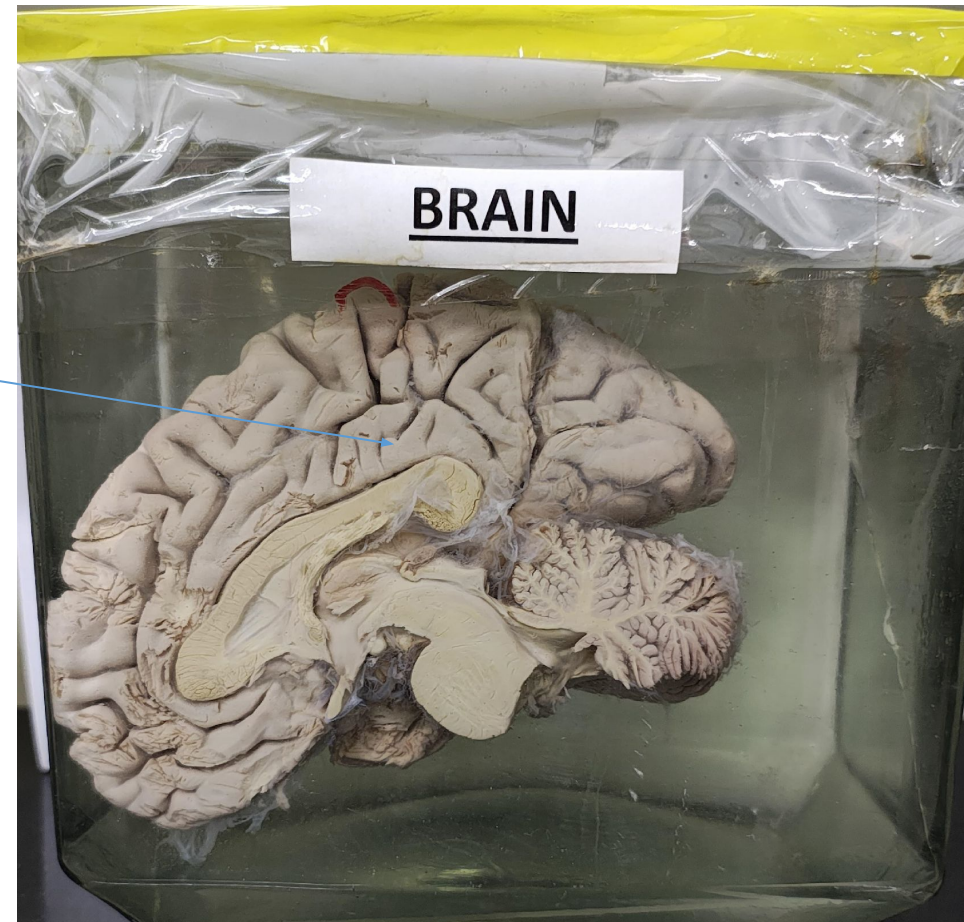
BRAIN

Gross:

- Specimen received shows sagittal section of the brain showing corpus callosum.
- Gyrus seen with raised ridges or folds on the surface of the brain.
- The grooves or indentations between the gyri are sulci.

Microscopy:

- Gray matter is the outer layer of the brain, composed primarily of neuronal cell bodies, dendrites and axon terminals.
- White matter, located deeper in the brain, consists of myelinated axons.



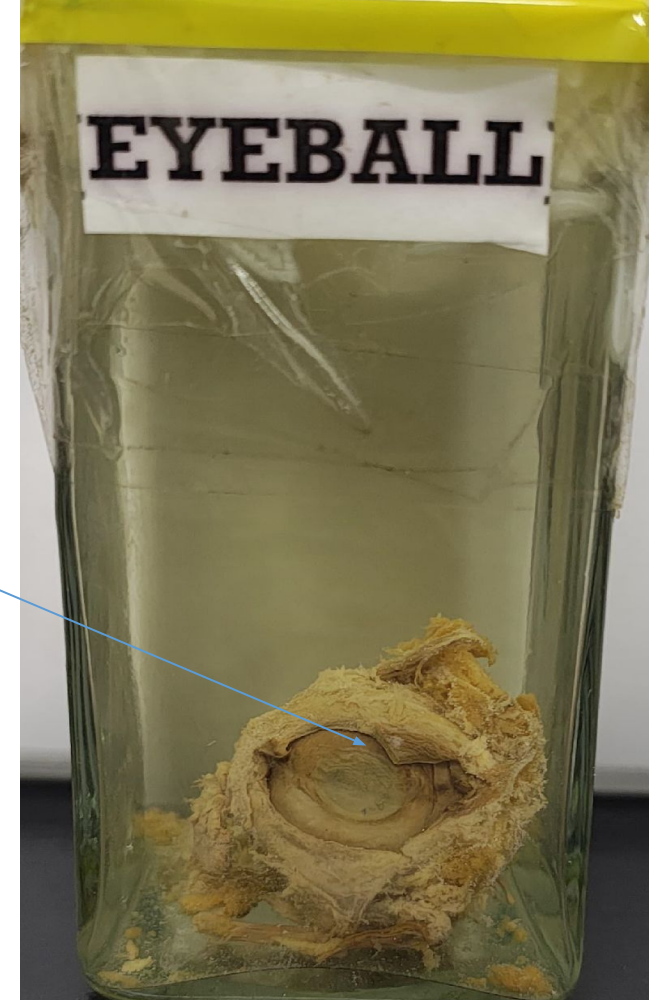
EYEBALL

Gross:

- Specimen received shows the sclera is the tough, opaque, white part of the eyeball.
- The cornea is the transparent, anterior part of the outer layer that allows light to enter the eye.
- On cutting open aqueous and vitreous fluid is seen.

Microscopic :

- Sections studied from the sclera show dense connective tissue structure and the irregular arrangement of collagen fibers.
- The sclera also has distinct concentric layers, including the episclera, stroma, and lamina fusca.
- Section studied from the cornea reveal stratified squamous epithelial lining with underneath collagenous stroma.
- Below the cornea is the pigment layer of choroid along with retinal layers.



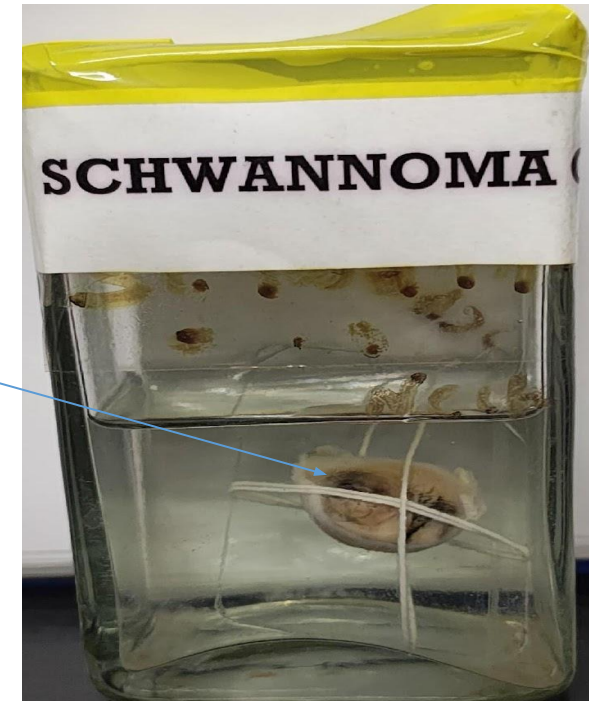
SCHWANNOMA

Gross:

- Specimen received of a solid globular tissue piece.
- Externally congested, smooth, glistening and encapsulated.
- On cutting open, whitish to brownish homogenous shiny areas are seen.

Microscopy:

- Section studied show a benign nerve sheath tumour comprising of compact hypercellular Antoni A areas and myxoid hypocellular Antoni B areas.
- Individual tumour cells are spindle shaped with elongated to wavy nuclei and moderate amount of eosinophilic cytoplasm.
- Nuclear palisading around fibrillary process (Verocay bodies) is seen in hypercellular areas.
- There is no evidence of malignancy.



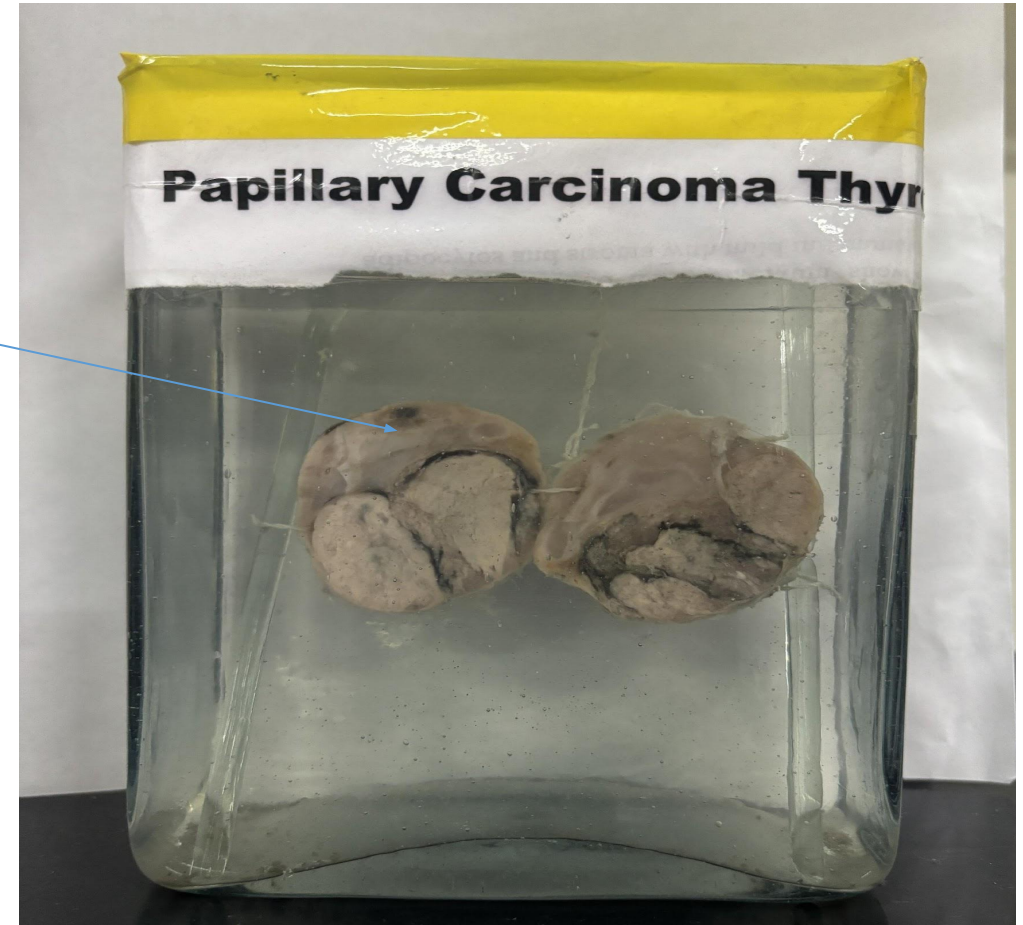
PAPILLARY CARCINOMA

Gross:

- Received thyroid specimen, externally encapsulated.
- On cut open, nodular mass, brown to tan in color with solid and cystic areas seen.
- Grossly capsular invasion seen.

Microscopy:

- Multiple section studied show tumor cells arranged in papillary pattern lined by cuboidal epithelium containing fibrovascular core.
- These tumor cells are having hyperchromatic nuclei some of which are showing nuclear clearing, ground glass appearance (Orphan Annie nuclei), nuclear grooving and at places irregular nuclear membrane in a moderate amount of cytoplasm
- Capsular invasion and vascular invasion are also appreciated.
- Large area of hemorrhage, necrosis and hyalinization are also seen.



MULTINODULAR GOITRE

Gross:

- Specimen of thyroid received, externally congested and nodular. Capsule is intact.
- On cut surface shows multiple nodules filled with gelatinous brownish material, ranging from 2cm to 7 cm in diameter.
- Areas of cystic degeneration and calcification are seen.
- Periphery shows normal thyroid tissue.

Microscopy:

- Section studied reveal macro and micro follicles lined by cuboidal to columnar epithelial cells and containing colloid.
- Areas of follicular hyperplasia are seen.
- Areas of cystic degeneration and calcification also seen.



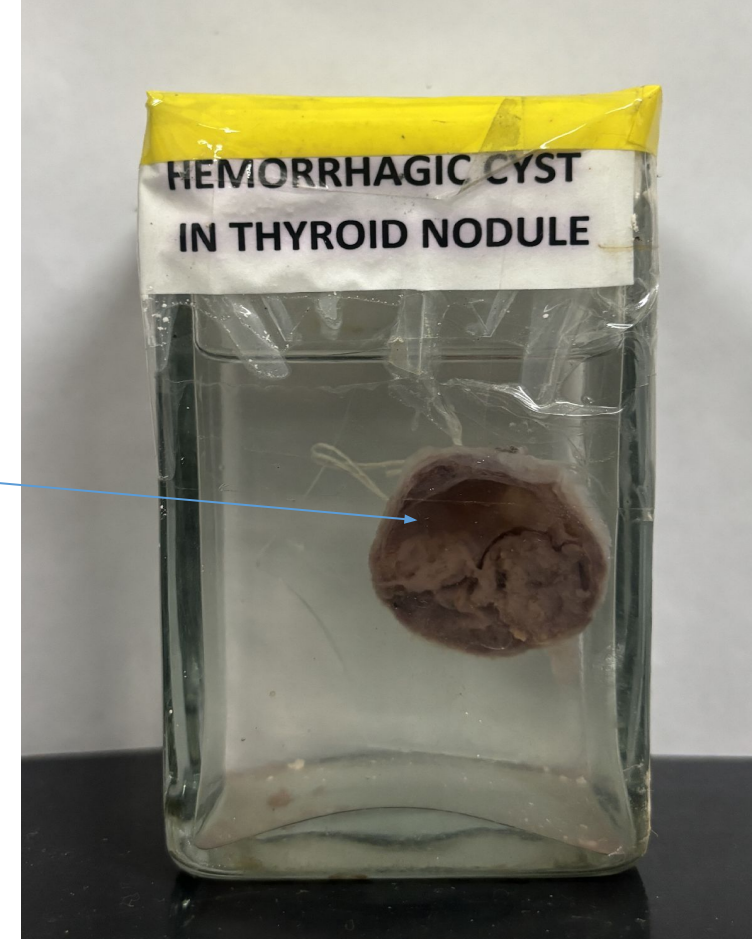
HAEMORRHAGIC CYST THYROID NODULE

Gross:

- Received thyroid tissue with intact capsule.
- On cutting open two well capsulated, grayish brown nodules filled with brownish to hemorrhagic fluid are seen.

Microscopy:

- Sections studied from thyroid shows thin fibrous capsule.
- Under it there is proliferation of follicles of varying size, lined by cuboidal to columnar epithelium filled with colloid
- Area of hemorrhage and hemosiderin laden macrophages are seen.



SIMPLE GOITRE

Gross:

- Received thyroid tissue with intact capsule.
- On cutting open, grayish brown nodule filled with brownish gelatinous material is seen.

Microscopy:

- Section studied reveal variable sized follicles lined by cuboidal to columnar epithelial cells and containing colloid.
- Thyroid capsule is intact.



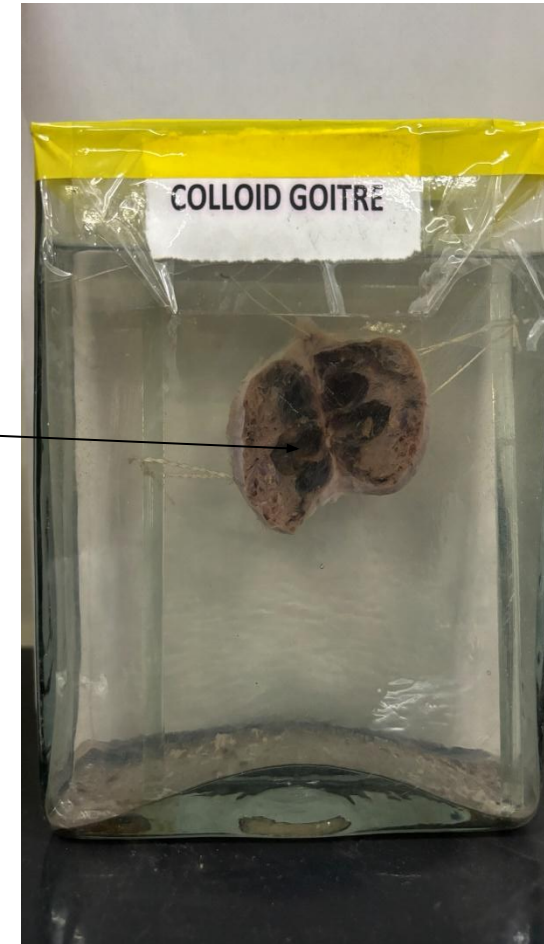
COLLOID GOITRE

Gross:

- Received thyroid tissue with intact capsule.
- On cutting open, grayish brown nodule filled with brownish gelatinous material is seen.
- Periphery shows normal thyroid tissue.

Microscopy:

- Section shows macro and micro follicles lined by cuboidal to columnar epithelium.
- Follicles are seen containing colloid .
- Thyroid capsule is intact.



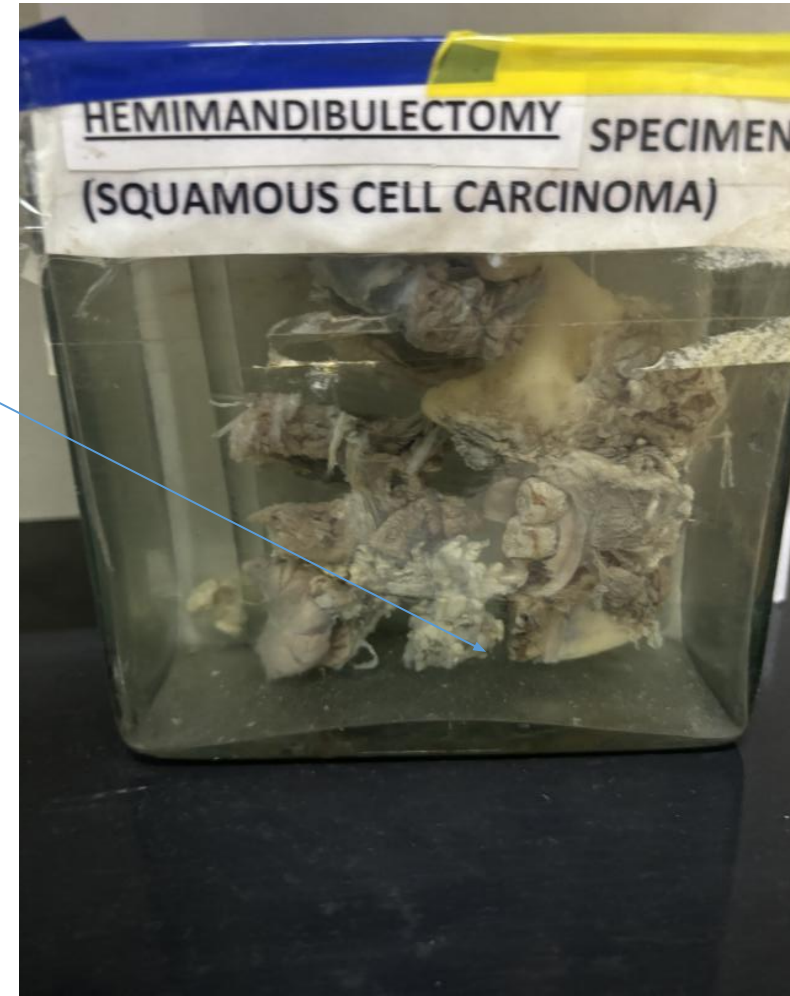
HEMIMANDIBULECTOMY-SQUAMOUS CELL CARCINOMA

Gross:

- Received specimen of mandible with a ulcero-proliferative growth on its surface.
- Cut surface of tumor is whitish, firm and gritty.

Microscopy:

- Sections reveal tumour cells arranged in sheets and islands.
- Individual tumour cells are round to polygonal with pleomorphic, hyperchromatic nuclei, prominent nucleoli and moderate amount of eosinophilic cytoplasm.
- Keratin pearls and intercellular bridges are seen.
- Tumour is surrounded by desmo inflammatory reaction.



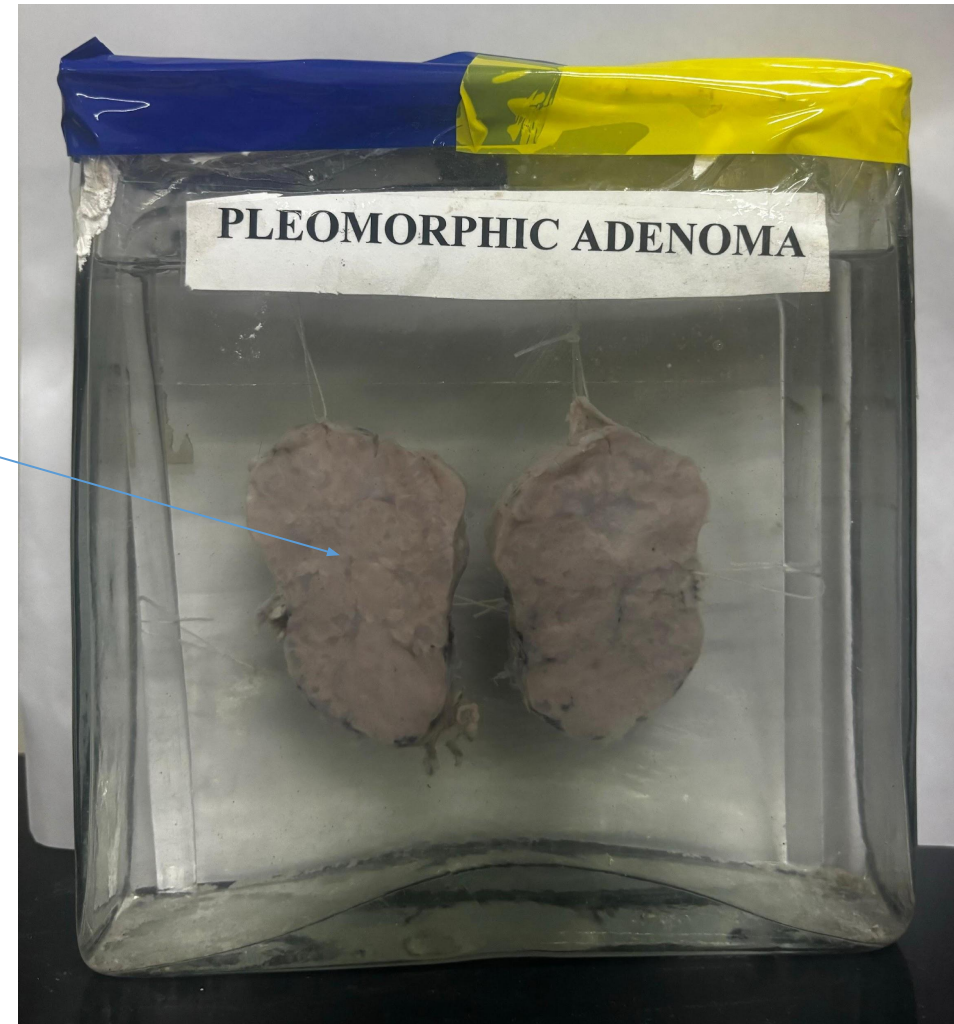
PLEOMORPHIC ADENOMA

Gross

- Received single glandular tissue covered with capsule.
- On cut open encapsulated grayish brown, soft tumour is seen.

Microscopy

- Section studied show cystically dilated spaces lined by inner layer of ductal epithelial cells and outer layer of myoepithelial cells.
- There is chondromyxoid stroma showing osseous metaplasia along with moderate mixed inflammatory infiltrate
- At places, area of hemorrhage and necrosis also seen



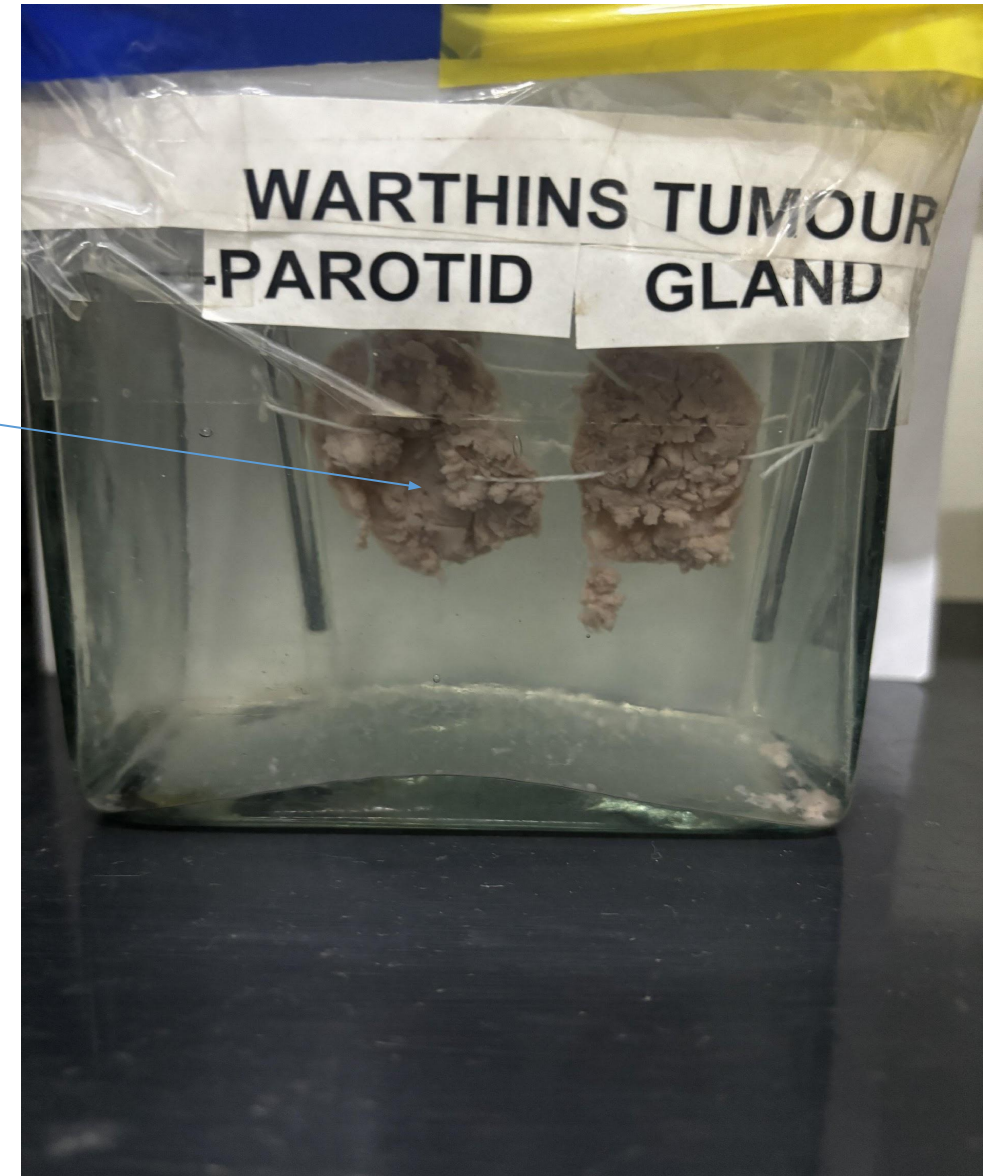
WARTHINS TUMOUR PAROTID GLAND

Gross:

- Received single soft tissue reddish brown in color.
- On cut solid, pinkish white, well circumscribed mass identified.

Microscopy:

- Section studied shows an encapsulated tumor composed of tumor cells arranged in papillary cystic architecture lined by bi-layered epithelial cells.
- Epithelium lined by inner columnar and outer cuboidal cells.
- Stroma shows lymphoid nodules containing germinal center.



FOLLICULAR LYMPHOMA - LOW GRADE

Gross:

- This specimen of lymph node measuring 8.5 x 6.5 cm.
- The cut surface is tan, irregular with a fish like fleshy appearance

Microscopy:

- Section studied reveals effaced lymph node architecture.
- Tumor cells are arranged in nodular pattern.
- Individual tumour cells large cells with open nuclear chromatin, several nucleoli, and moderate amounts of cytoplasm (centroblasts).
- Few small cells with irregular or cleaved nuclear contours and scant cytoplasm (centrocytes) are also seen.

