

DEPARTMENT OF PATHOLOGY BONES & SOFT TISSUES



FIBROMA

Gross:

- Specimen of soft tissue tumor measuring 5 x
 5 x 4cm. Outer surface irregular, grayish white with intact capsule.
- Cut surface showing grayish white homogenous areas with whorl like pattern.

- Section studied shows tumor cells arranged in whorls and interlacing fascicles.
- Individual tumor cells are spindle to ovoid with elongated, bland nuclei and scant eosinophilic cytoplasm.





LIPOMA

Gross:

- This specimen of fibrofatty globular encapsulated tissue mass measuring 5x4cm.
- Outer surface is smooth, glistening and
- congested.
- Cut surface is yellow, homogenous and greasy.

Microscopy:

• The section of lipoma showing the presence of a thin fibrous capsule surrounding the periphery. The tumour is composed of lobules of mature adipose cells separated by thin fibrous septa.





MESENCHYMAL CHONDROSARCOMA- UPPER END OF HUMERUS

Gross:

- Received a large bulky globular mass
- Externally congested and gray-white in colour.
- Cut surface is gray white, firm, slightly translucent, with spots of necrosis and hemorrhage.

- Section studied reveals lobules of anaplastic cartilage tumor cells.
- Individual tumor cells are round to elliptical with hyperchromatic pleomorphic nuclei forming lacunae.
- Tumor giant cells also seen.





NEUROFIBROMA

Gross:

- Specimen received is a nodular tissue.
- External surfaces are smooth, glistening and congested.
- Cut surface is homogenous, gray to tan shiny.

- Section reveals benign spindle cell neoplasm composed of tumour cells arranged in whorls and nodules.
- Individual tumour cells are spindle with elongated wavy nuclei and scant cytoplasm.
- Verocay bodies are not seen.
- Mitosis is not seen.





OSTEOCHONDROMA

Gross:

- Received bony tissue piece externally covered by cartilage.
- On cutting open brownish hemorrhagic areas seen.

- Section reveals benign hyaline cartilage covered by fibrocollagenous tissue.
- Underneath is bony trabeculae along with marrow elements.





OSTEOMYELITIS

Gross:

 Received bony tissue piece with attached soft tissue, Grayish black colored and firm to hard in consistency

- •Sections studied show loose fibro-collagenous tissue along with fragments of necrosed bone.
- Inflammatory cells infiltrate comprising of neutrophils, lymphocytes and macrophages.
- Areas of hemorrhage and congested blood vessels are also seen.





BENIGN FIBROUS HISTIOCYTOMA

Gross:

 Received well circumscribed tissue mass.
 Cut surface is white-tan, firm with focal areas of hemorrhage.

- Tumour cells are arranged in whorls and storiform pattern.
- Individual Tumor cells are spindle in shape with plump, ovoid vesicular nuclei and pale eosinophilic cytoplasm. Touton type giant cells and Lymphocytes are seen. Areas of







INFECTED FIBROLIPOMA

Gross:

- Received well circumscribed, encapsulated and nodular mass.
- Cut surface is homogenous, yellowish and greasy in appearance.

- Section studied reveals benign encapsulated soft tissue composed of mature adipocytes.
- Paucicellular fibrous septa are seen intersecting the adipose tissue along with inflammatory cells infiltrate.





LEIOMYOSARCOMA

Gross:

- Specimen is fleshy, gray-white mass.
- Cut surface shows whorled appearance with areas of hemorrhage, necrosis and areas of cystic degeneration.

- Tumor cells are arranged in long intersecting fascicles
- parallel and perpendicular to the plane of section
- Individual tumor cells are spindled with pleomorphic
- bizarre, hyperchromatic nuclei and scant cytoplasm.
- Mitosis 10 / 10 hpf are seen.
- Areas of haemorrhage, necrosis and cystic degeneration are seen.





LIPOSARCOMA

Gross:

- A large soft tissue tumor specimen measuring approx 14 x 9 x 9.5 cm
- On cutting a lobulated surface with yellow colored fatty appearance is seen

- Section reveals tumor cells arranged in diffuse pattern.
- Individual tumor are round with eccentric pleomorphic nuclei and vacuolated cytoplasm (lipoblast).
- Mitosis is seen.





NON OSSIFYING FIBROMA

Gross:

- Well circumscribed, red-brown with areas of yellow discoloration and having sclerotic borders
- Cut surface is firm, can exhibit cystic, hemorrhagic and necrotic areas.

- Sections show spindle shaped fibroblasts arranged in storiform pattern, interspersed with osteoclastlike multinucleated giant cells
- Variable amount of foamy and hemosiderin laden macrophages seen.
- Areas of reactive woven bone formation also seen





PERI VASCULAR TUMOUR

Gross:

- Specimen is polypoid and externally congested.
- Cut surface is reddish -brown with areas of haemorrhage.

- Section reveals tumour cells arranged in nests separated by fibrous septa and thin vascular spaces.
- Tumour cells have a plump, epitheloid nucleus with granular cytoplasm, distinct borders and round medium-large nuclei.





PLEOMORPHIC FIBROSARCOMA

Gross:

- Received specimen of soft tissue mass.
- The outer surface of which is showing lobulations and grayish tan in colour.
- Cut surface shows nodular surface with variegated appearance and whorling pattern.
- Central areas of degeneration and necrosis are seen.

- Section studied reveals tumour cells arranged in interlacingfascicles, typically herringbone pattern.
- Individual tumour cells are plump, spindled cells with elongated pleomorphic nuclei and scant cytoplasm.
- Mitotic figures are seen.

