WSC 2024-2025 Conference 2, Case 1 Tissue from a cat.

MICROSCOPIC DESCRIPTION: Jejunum (1pt.): Within this section, there is a transmural, (1pt.) infiltrative, unencapsulated, densely cellular round cell neoplasm. (1pt.) There is marked separation and occasional ectasia of crypts (1pt.), and villi are diffusely and markedly blunted. (1pt.) Within the mucosa, neoplastic cells expand lamina propria of the blunted villi (1pt.), and infiltrate the overlying mucosa. (1pt.) The submucosa is markedly expanded (1pt.), and tumor cells infiltrate the underlying tunica muscularis, dissecting between smooth muscle bundles and expanding the fibrovascular space separating the two muscle tunics. (1pt.) Neoplastic cells are round with indistinct cell borders and a moderate amount of finely granular eosinophilic cytoplasm. (1pt.) Nuclei are round with coarsely clumped chromatin and often one prominent central nucleolus. (1pt.) Nuclei equal d the size of two erythrocytes (1pt.), there is mild anisokaryosis, and mitoses average 1 per 400X field. (1pt.) Within the submucosa, there are large lymphoid aggregates with prominent germinal centers. (1pt.)

MORPHOLOGIC DIAGNOSIS: Jejunum: Lymphoma (1pt.), intermediate cell (1pt.), low grade. (1pt.)

NAME THE MOST LIKELY CLASSIFICTION: Enteropathy-associated T-cell lymphoma type 1 (EATL-1) (3pt.)

WSC 2024-2025 Conference 2, Case 2 Tissue from a dog.

MICROSCOPIC DESCRIPTION: Thymus: Arising from an expansive, multilocular branchial cyst located within an involuted thymus, there is an unencapsulated, moderately cellular, poorly demarcated, multilobular neoplasm. The neoplasm is composed of epithelial cells arranged in trabeculae, cords, and tubules on a fine fibrovascular stroma. Tubules range up to 1mm in diameter. Small tubules contain a small amount of wispy basophilic protein, while more ectatic tubules may contain variable amounts of serum and hemorrhage.. Neoplastic cells are columnar to cuboidal and have distinct cell borders with a moderate among of basophilic cystoplasm. Nuclei are irre round with finely stippled chromatin and 1-2 basophilic nuclei. Anisocytosis and anisokaryosis is mild, and mitoses average 6 per 2.37mm² field. (1pt)

At the edge of the neoplasm, there is an extensive branchial cyst, which is lined by a single layer of columnar to cuboidal ciliated epithelium with a moderate fibrous stroma containing low numbers of lymphocytes often in aggregates and debris-laden macrophages. The cyst lumen contains amphophilic granular cellular debris and sloughed epithelial cells.

MORPHOLOGIC DIAGNOSIS: Branchial cyst: Branchial carcinoma

O/C: (1pt.)

WSC 2024-2025 Conference 2, Case 3. Tissue from a horse.

MICROSCOPIC DESCRIPTION: Lymph node: Two sections of lymph node are submitted for examination. In both sections, the architecture is effaced (1pt.) by a proliferation of large lymphocytes (1pt.). Proliferating lymphocytes have indistinct cell borders and a moderate amount of finely granular eosinophilic cytoplasm. (1pt.) Nuclei are round with coarsely stippled chromatin and often a single prominent nucleolus. (1pt.) Anisokaryosis is moderate (1pt.), and mitoses average 4 per 400X field. There are numerous tingible body macrophages (1pt.) scattered throughout the proliferating lymphocytes. The lymphocytic proliferation is contained within the capsule in one of these two sections. (1pt.)

Spleen: There is a diffusely distributed population of lymphocytes as previously described (1pt.) within the splenic red pulp (1pt.), which effaces normal splenic white pulp.

Liver: Scattered within the section, in moderate numbers surrounding portal and hepatic venules (1pt.) are large lymphocytes as previously described, which are admixed with fewer small lymphocytes. (1pt.) Erythroid precursors are scattered in small aggregates within the sinusoids. (1pt.) Hepatocytes are diffusely expanded by accumulation of cytoplasmic glycogen. (1pt.) There is a large clot (not a thrombus in this section, as there is no mural attachment of inflammation) in a branch of the portal vein (1pt.) and large lymphocytes may be seen in there as well. There are low to moderate numbers of small lymphocytes and plasma cells within portal areas. (1pt.)

MORPHOLOGIC DIAGNOSIS: Lymph node, spleen, liver: Atypical lymphoid proliferation. (2pt.)
2. Liver: Extramedullary hematopoiesis, diffuse, moderate. (1pt.)

NAME THE CONDITION: Feline autoimmune lymphoproliferative syndrome (2pt.)

O/C: (1pt.)

WSC 2020-2021 Conference 2 Case 4. Tissue from a cat.

MICROSCOPIC DESCRIPTION: Intestine: Multiple contiguous loops of small intestine are submitted for examination. (1pt) There is moderate autolysis with loss and sloughing of villar enterocytes (and to a lesser extend crypt enterocytes) in each section. (1pt) Segmentally surrounding and encasing loops of intestine (1pt) are variably thick layers of fibrous connective tissue (1pt) with collagen fibers (1pt) populated by plump fibroblasts. (1pt) A gradation of maturation (1pt)may be seen in some areas, with more loosely arranged collagen, fibroblasts, and immature blood vessels lined by plump endothelium (1pt)oriented perpendicularly to the intestinal wall (granulation tissue.) (1pt) In some areas, loops of gut share the same layer of encasing fibrous connective tissue (fibrous adhesion.) (1pt) Multifocally, the fibrous connective tissue is infiltrated by moderate numbers of neutrophils admixed with cellular debris. (1pt) In some areas, particular those with a degree of granulation tissue, the fibrous connective tissue is mildly edematous, (1pt) and in other areas it incorporates the mesenteric fat. (1pt) There are few lymphocytes and plasma cells expanding the perivascular areas in the smooth muscle wall of affected bowel loops. (1pt)

MORPHOLOGIC DIAGNOSIS: Intestinal peritoneum: Fibrosis (1pt) and mature granulation tissue (1pt), diffuse, moderate with intestinal fibrous adhesions (1pt).

NAME THE CONDITION: Sclerosing encapsulating peritonitis. (2pts.)

O/C: **(1pt)**