

WSC 2017-2018  
Conference 22 Case 1.  
Tissue from a horse.

**MICROSCOPIC DESCRIPTION:** Ileum **(1pt.)**: Replacing approximately 50% of the submucosa and extending outward from ileal lymphoid tissue **(1pt.)**, there is an unencapsulated, infiltrative, moderately cellular, well-demarcated neoplasm. **(1pt.)** The neoplasm is composed of neoplastic large lymphocytes **(1pt.)** (B cells) **(1pt.)** arranged in sheets **(1pt.)** on a pre-existent stroma. Neoplastic cells have distinct cell borders with a moderate amount of granular purple cytoplasm, however due to the level of autolysis, size comparison with erythrocytes as to size is not possible. **(1pt.)** Nuclei are round, with coarsely clumped chromatin and 1-2 small pink nucleoli. **(1pt.)** The mitotic count is 3 per 400X field (2.27 mm<sup>2</sup>). The neoplasm is infiltrated by large numbers of small lymphocytes (T cells) **(1pt.)**. Within the neoplastic cell population, there is abundant apoptosis. **(1pt.)** The neoplasm extends partially into the overlying lamina propria **(1pt.)** adjacent to lymphoid follicles as well as the underlying submucosa and into the superficial muscularis. The overlying mucosa is autolytic.

Multifocally, with the submucosal (Meissner's) plexus and that of the tunica muscularis (Auerbach's) neurons are decreased in number **(1pt.)**. Remaining neurons are swollen and eosinophilic **(1pt.)**, and there is infiltration of the plexus by low numbers of small lymphocytes. **(1pt.)**

**MORPHOLOGIC DIAGNOSES:** 1. Colon: T-cell rich B cell lymphoma (large cell, low grade B cell) **(4pt.)**

2. Colon, submucosal and muscularis: Ganglioneuritis, lymphocytic, diffuse, mild with neuronal loss.. **(1pt.)**

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

WSC 2017-2018  
Conference 22 Case 2.  
Tissue from a dog.

(This slide is not worth describing. )

**MICROSCOPIC DESCRIPTION:** Cerebrum at the level of the anterior diencephalon **(1pt.)**. The meninges and Virchow-Robins spaces throughout the section are infiltrated by low to moderate numbers of small and intermediate size lymphocytes which occasionally extend into the surrounding perivascular or perimeningeal neuroparenchyma. Numerous lymphocytes are apoptotic. There is mild sclerosis of the choroid plexus.

**MORPHOLOGIC DIAGNOSIS:** Cerebrum, diencephalon: Meningoencephalitis, lymphocytic, diffuse, mild.

**CAUSE:** ??? (The contributor considered this a primary T-cell lymphoma, however, in an 8-week-old puppy, some form of viral infection is more likely. There is no mass lesion here, and one was not described by the contributor. )

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

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Conference 22, Case 3.

Tissue from a dog.

MICROSCOPIC DESCRIPTION: Liver: The majority of sublobular, portal, and central veins **(1pt.)** contain an unencapsulated, moderately cellular, infiltrative, poorly demarcated neoplasm **(2 pt.)** composed of numerous neoplastic lymphocytes **(1pt.)**. The neoplastic lymphocytes are twice the size of an erythrocyte (large cell) **(1pt.)**, and have indistinct cell borders with a moderate amount of finely granular eosinophilic cytoplasm **(1pt.)**. Nuclei have coarsely clumped chromatin, a mildly irregular, occasionally indented border, and 1-3 nucleoli. **(1pt.)** The mitotic count is 15 per 400X field (2.37mm<sup>2</sup>) (high grade) **(1pt.)** Apoptotic lymphocytes are common **(1pt.)**, and aggregates of lymphocytes within vessels often are occasionally enmeshed within fibrin thrombi. **(1pt.)** Neoplastic lymphocytes occasionally are present within the sinusoids immediately adjacent to vessels containing cellular thrombi. **(1pt.)** Hepatocytes contain a moderate amount of brownish intracellular lipofuscin granules. There is diffuse minimal to mild centrilobular fibrosis, micronodular hemosiderosis, subcapsular hepatocellular loss and dilation of portal lymphatics (edema).

MORPHOLOGIC DIAGNOSES: Liver: Intravascular large cell high grade T-cell lymphoma. **(4pt.)**

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

WSC 2017-2018  
Conference 22 Case 4.  
Tissue from a cat.

MICROSCOPIC DESCRIPTION: Haired skin, subcutis: Within the subcuticular fat **(1pt.)**, there is a focally extensive, infiltrative, unencapsulated, well-demarcated densely cellular neoplasm. **(2pt.)** The neoplasm is composed of large lymphocytes **(1pt.)** with a diameter over twice the size of an erythrocyte **(1pt.)** which are arranged in sheets **(1pt.)** on a pre-existent fibrovascular stroma. **(1pt.)** . Neoplastic lymphocytes have indistinct cell borders with a moderate amount of finely granular eosinophilic cytoplasm. **(1pt.)** Nuclei are large with coarsely clumped chromatin and 1-3 large nucleoli. **(1pt.)** The mitotic count is 14 per 400X field (2.37mm<sup>2</sup>). **(1pt.)** Neoplastic lymphocytes are multifocally present within vessel walls **(1pt.)**, admixed with small amounts of cellular debris, and the adjacent tissue (approximately 33% of the neoplasm) is characterized by peritheliomatous survival **(1pt.)** of neoplastic cells. Areas of necrosis contain various combinations and concentrations of fibrin**(1pt.)**, edema **(1pt.)**, necrotic debris and in some areas, a thick hyalinized bed of mature collagen. **(1pt.)**

MORPHOLOGIC DIAGNOSIS: Haired skin: Large cell high grade injection site lymphoma **(4pt.)**.

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