WSC 2025-2026
Conference 14 Case 1
Tissue from a horse.

MICROSCOPIC DESCRIPTION: Liver: Two sections of liver are submitted for examination and both are similar. There's diffuse loss of normal sinusoidal architecture **(1pt)** characterized by occlusions of sinusoids and a lack of erythrocytes as a result of hepatocellular swelling **(2pt)**. Diffusely throughout the hepatic lobule, and proportionately most severe in periportal>midzonal>centrilobular hepatocytes **(2pt)**, hepatocytes are swollen up to 20 microns **(1pt)** due to the accumulation of large numbers of clear discrete lipid vacuoles **(2pt)** within their cytoplasm **(1pt)**. Hepatocytes immediately surrounding central veins are occasionally hypereosinophilic with karyolysis (necrosis) **(1pt)**, and central veins contain sloughed vacuolated hepatocytes within their lumina **(1pt)**. There is mild edema as demonstrated by dilation of portal lymphatics around sublobular veins **(1pt)** and multifocal infiltration of portal areas by lymphocytes and plasma cells. **(1pt)**

MORPHOLOGIC DIAGNOSIS: Liver, hepatocytes: Microvesicular **(2pt)** lipidosis **(2pt)**, diffuse, severe, **(1pt)**

CAUSE: Phophide toxicosis **(1pt)**

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

WSC 2025-2026
Conference 14, Case 2
Tissue from a horse.

MICROSCOPIC DESCRIPTION: Kidney: Approximately 66% of the section (both cortex and medulla) effaced by coalescing areas of granulomatous inflammation **(1pt.)** consisting of sheets of epithelioid macrophages **(1pt.)** admixed with low to moderate numbers of eosinophils **(1pt.)**, multinucleated macrophages of the foreign body- and Langhans' types **(1pt.)**, lymphocytes **(1pt.),** plasma cells **(1pt.)**, fewer neutrophils **(1pt.)**, and often large amounts of aggregated eosinophilic cellular debris enmeshed in dense bands of mature fibrous connective tissue **(1pt.)**. Entrapped within the granulomatous inflammation there are rare cross- and tangential sections of adult **(1pt.)** rhabditoid nematodes **(1pt.)** that are 10-25 um in diameter with a smooth cuticle, platymyarian-meromyarian musculature, an esophagus with terminal bulb **(1pt.)**, and numerous deeply basophilic 2-3 um internal structures within the pseudocoelom. Smaller larvae **(1pt.)** measuring 8-10um with a thin cuticle are numerous. Within the areas of granulomatous inflammation, there is marked interstitial fibrosis which compress remnant glomeruli and tubules, resulting in tubular atrophy and loss **(1pt.)**, profound tubular ectasia with protein casts and sloughed tubular epithelium, and interstitial aggregates of lymphocytes and plasma cells.

MORPHOLOGIC DIAGNOSIS: Kidney: Nephritis, granulomatous **(1pt.)**, chronic, multifocal to coalesing severe, with adult and larval rhabditoid **(1pt.)** nematodes **(1pt.)** and eggs.

CAUSE: *Halicephalobus gingivalis* **(3pt.)**

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

WSC 2025-2026
Conference 13, Case 3.
Tissue from a donkey.

MICROSCOPIC DESCRIPTION: Omentum **(1pt.)**: Markedly expanding the omentum and effacing omental architecture, there is an unencapsulated, poorly demarcated, moderately cellular neoplasm **(2pt.)** composed of polygonal epithelioid cells **(1pt.)** arranged in large cystic spaces **(1pt.)** which are lined by epithelioid mesothelial cells which form papillary and micropapillary **(1pt.)** into the cystic spaces on a dense fibrovascular stroma **(1pt.)**. Neoplastic cells have variably distinct cell borders and a moderate amount of homogenous eosinophilic cytoplasm **(1pt.)** with an occasional perinuclear clearing. **(1pt.)** Nuclei are irregularly round with finely stippled chromatin **(1pt.)** and a single prominent central nucleolus **(1pt.)**. There is moderate anisocytosis and anisokaryosis, modeate nuclear pleomoprhoism., and there is an average of 18 mitotic figure per 2.37mm^2. **(1pt.)** Atypical mitotic figures are common. **(1pt.)** There is occasional single cell necrosis. **(1pt.)** Focally, neoplastic stroma is expanded by numerous lymphocytes and plasma cells. **(1pt.)**

MORPHOLOGIC DIAGNOSIS: Omentum: Mesothelioma **(4pt.)**

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

WSC 2025-2026
Conference 14, Case 4.
Tissue from a sheep.

MICROSCOPIC DESCRIPTION: Small intestine: Extending transmurally downward from the dysplastic deep mucosa, there is an unencapsulated, infiltrative, moderately cellular, poorly demarcated, multilobular neoplasm. **(2pt.)** The neoplasm is composed of polygonal and occasionally spindled epithelial cells **(1pt.)** arranged in nest, packets **(1pt.)**, and tubules **(1pt.)** on a modeate desmoplastic fibrous stroma. **(1pt.)** Neoplastic cells have indistinct cell borders with a moderate amount of vacuolated eosinophilic cytoplasm. **(1pt.)** Nuclei are irregularly round with finely stippled chromatin and 1-3 prominent basophilic nucleoli. **(1pt.)**Anisocytosis and anisokaryosis are moderate and the mitoses average 5 per 2.37mm^2 field. **(1pt.)** The neoplasm arises from the deep mucosa, where crypts architecture is lost. **(1pt.)** At the lateral edges of this area of architectural distortion, remnant crypts are markedly ectatic and contain numerous viable and degenerative neutrophils and cellular debris. **(1pt.)** There is marked villar blunting on either side of the neoplasm. **(1pt.)** There are increased numbers of lymphocytes and plasma cells within the lamina propria. The neoplasm multifocally extends through the muscularis mucosa, submucosa, through the perivascular tissue in the muscularis, partially effacing the outer circumferential layer of smooth muscle, and markedly expands the desmoplastic and fibrotic serosa. **(1pt.)** Serosall lymphatics are diffusely and markedly dilated. The neoplasm extends into the adjacent omentum. **(1pt.)**

MORPHOLOGIC DIAGNOSIS: Jejunum: Intestinal adenocarcinoma. **(5pt.)**

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