

WSC 2023-2024  
Conference 16, Case 1  
Tissue from a rabbit.

**MICROSCOPIC DESCRIPTION:** Cecum **(1pt.):** There is diffuse transmural (1pt) necrosis , focused on the mural lymphoid tissue. **(1pt.)** Areas of lymphoid tissues are diffusely outlined by well-demarcated foci of lytic necrosis **(1pt)** composed of abundant eosinophilic cellular debris throughout which is scattered numerous degenerate heterophils and few remaining viable lymphocytes, **(1pt.)** There is infiltration of the overlying and adjacent lamina propria by large numbers of debris-laden macrophages and fewer heterophils. **(1pt.)**

**Spleen:** The splenic architecture is diffusely effaced by foci of lytic necrosis as previously described. **(1pt.)** There is diffuse loss of splenic architecture, diffuse lymphoid depletion **(1pt.)**, and abundant edema with scattered hemorrhage and hemosiderin-laden macrophages. **(1pt.)** Numerous fibrocytes and fibrosis extends into the adjacent perinodal fat. There are rare large colonies of coccobacilli at the periphery of some areas of necrosis. **(1pt.)**

**Liver:** Multifocally and randomly scattered through the section are foci of lytic necrosis (1pt) areas of lytic necrosis. **(1pt.)** Foci of necrosis contain large numbers of necrotic heterophils admixed with cellular debris, **(1pt.)** which are surrounded by 1-3 layers of foamy macrophages and few lymphocytes and bounded by loosely arranged collagen. **(1pt.)** At their periphery swollen hepatocytes contain granular eosinophilic and vacuolated cytoplasm with accumulations of lipid (1pt), glycogen, or both (degeneration) or rarely exhibit pyknotic nuclei (necrotic) **(1pt.)**

**MORPHOLOGIC DIAGNOSIS:** 1. Cecum: Typhlitis , necrotizing and heterophilic, **(1pt.)** subacute, diffuse, moderate with diffuse severe Peyer's patch necrosis. **(1pt.)**  
2. Spleen: Splenitis, necrotizing and heterophilic, chronic diffuse, severe with large colonies of bacilli. **(2pt.)**  
3. Liver: Hepatitis, necrotizing and heterophilic, subacute, multifocal, random. **(1pt.)**

**CAUSES:** *Yersinia pseudotuberculosis* **(2pt.)**

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

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Conference 16, Case 2

Tissue from a rose-ringed parakeet.

**MICROSCOPIC DESCRIPTION:** Liver **(1pt.)**: There are large coalescing areas of coagulative **(1pt.)** necrosis **(1pt.)** affecting up to 75% of the liver. **(1pt.)** These areas of necrosis are characterized by retention of architecture and loss of differential staining **(1pt.)** with areas of hemorrhage **(1pt.)**, rare hemosiderin-laden macrophages, and few infiltrating heterophils. **(1pt.)** They are occasionally bounded by a dense basophilic band of necrotic heterophils and erythrocytes **(1pt.)** which are admixed with abundant cellular debris. At their periphery, viable hepatocytes often contain large single or multiple lipid droplets **(1pt.)** and occasionally intracytoplasmic brown pigment. **(1pt.)** There is moderate amount of anisokaryosis **(1pt.)** and larger nuclei often contain a single basophilic nucleolus. **(1pt.)**

**MORPHOLOGIC DIAGNOSIS:** Liver: Necrosis **(1pt.)**, coagulative **(1pt.)**, multifocal to coalescing, severe, with mild to moderate hepatocellular lipidosis. **(1pt.)**

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

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Conference 16, Case 3.

Tissue from a horse.

**MICROSCOPIC DESCRIPTION:** Liver: There is diffuse hepatocellular degeneration **(1pt.)**, necrosis **(2pt.)** and loss **(1pt.)** affecting all parts of the hepatocytic lobule (massive necrosis) **(1pt.)**, but most pronounced in centrilobular and midzonal regions**(1pt.)**. Within these areas, there is loss of hepatic plate architecture **(1pt.)**, large areas of hepatocellular loss **(1pt.)**, with replacement by red blood cells (hemorrhage) **(1pt.)**, and infiltration by low numbers of neutrophils and macrophages, **(1pt.)** admixed with abundant granular cellular debris and few siderophages. Remaining hepatocytes in periportal areas are in disarray, shrunken, have an irregular profile, and contain multiple cytoplasmic lipid droplets. **(1pt.)** There is marked biliary hyperplasia **(1pt.)** and portal areas are further expanded by low to moderate numbers of lymphocyte and plasma cells, fibroblasts, and mature collagen.

**MORPHOLOGIC DIAGNOSIS:** Liver: Necrosis **(1pt.)**, massive **(1pt.)**, diffuse, with stromal collapse **(1pt.)** and hepatocellular lipodosis. **(1pt.)**

**NAME THE CONDITION:** Theiler's disease (serum hepatitis OK) **(1pt.)**

**CAUSE:** Equine parvovirus **(2pt.)**

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

WSC 2023-2024  
Conference 16, Case 4.  
Tissue from a cat.

**MICROSCOPIC DESCRIPTION:** Liver: Two sections of liver are submitted for examination. There is a large dilated vessel and an area of profound acute hemorrhage **(1pt.)** subjacent to the capsule as well as smaller dissecting areas of subcapsular and parenchymal hemorrhage. **(1pt.)** Multifocally, within the parenchyma, there are numerous randomly scattered areas of intrasinusoidal **(1pt.)** pink waxy homogenous matrix **(1pt.)** (amyloid.) **(2pt.)** Hepatocytes are mildly compressed by this material **(1pt.)** and contain one or more lipid vacuoles and moderate amounts of intracytoplasmic brown pigment. **(1pt.)** Within portal areas, there are numerous tortuous arteriolar profiles **(2pt.)**, mild biliary hyperplasia **(1pt.)**, and some portal areas lack venous profiles. **(2pt.)** There are numerous areas of telangiectasia scattered through the liver (which are difficult to differentiate from areas of hemorrhage).

**MORPHOLOGIC DIAGNOSIS:** 1. Liver: Amyloidosis **(1pt.)**, intrasinusoidal, multifocal, marked, with parenchymal rupture with acute hemorrhage. **(1pt.)**

2. Liver, portal areas: Microvascular dysplasia **(1pt.)** with venous hypoplasia **(1pt.)** and numerous arteriolar profiles. **(1pt.)**

3. Liver, portal areas: Biliary hyperplasia, diffuse, mild to moderate. **(1pt.)**

4. Liver: Telangiectasia, multifocal.

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