



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2008 – Mock Exam Case 9

ECVP MOCK EXAMINATION, JACA, 2008

HISTOPATHOLOGY

Slide n°9: Tissue from a Canine

Description:

Liver: The normal liver architecture is lost and replaced by an invasive population of atypical histiocytes, hepatocellular necrosis and distorted hepatic cords. Histiocytes are present in sinusoids, some portal vein branches and occasional central veins, often forming coalescing foci. These histiocytes contain round to oval, sometimes slightly indented nuclei and 1-2 distinct nucleoli. They often form large multinucleated cells with up to 15 centrally located or peripheral nuclei, finely granular chromatin, moderate to abundant lightly eosinophilic to amphophilic cytoplasm and few mitotic figures. The cytoplasm of these histiocytes often contains phagocytosed erythrocytes (erythrophagocytosis), cellular and nuclear debris as well as finely granular yellowish brown pigment (hemosiderin). Multifocally there are small intracanalicular bile plugs (bile stasis). There is diffuse centrilobular to midzonal bridging necrosis and variable distention of central veins and adjacent sinusoids. Necrotic areas often contain small to moderate numbers of inflammatory cells, especially neutrophils, and apoptotic hepatocytes. In periportal areas not affected by necrosis there is distortion of hepatic cords and mild hepatocyte degeneration. Portal areas are mildly hypercellular due to lymphocytes and occasional plasma cells while macrophages and Kupffer cells throughout the lobules are distended by yellowish brown pigment (hemosiderin). Scattered foci of extramedullary hematopoiesis are present.

Morphologic diagnosis/diagnoses:

Liver: histiocytic sarcoma, hemophagocytic type and centrilobular to midzonal bridging hepatocellular necrosis.

Tissue: liver	1
Distortion of architecture	1
Atypical histiocytes	1
Location of histiocytes: portal veins, sinusoids, central veins	1
Giant cells	1
2-15 nuclei	1
1-2 nucleoli	1
Few mitoses	1
Phagocytosed erythrocytes	1
Bile stasis/plugs in canaliculi	1
Yellowish-brown pigment/hemosiderin in histiocytes	1
Hepatocellular necrosis, coagulative	1
Apoptotic liver cells	1
Sinusoidal dilation	1
Extramedullary hematopoiesis	1
MD: histiocytic sarcoma	1
hemophagocytic type	1
hepatocellular necrosis	1
Style	2
Total	20