ECVP/ESVP Summer School in Veterinary Pathology

Marie Curie Training Courses

Summer School 2004 – Mock Exam Case 5

Slide No. 5: Tissue from a FOAL

1. DESCRIPTION OF HISTOLOGICAL FINDINGS

Liver: randomly, affecting up to eighty percent of the liver parenchyma, there are multiple coalescing areas of abundant karyorrhectic and karyolytic, eosinophilic cellular debris with loss of cellular outline (lytic necrosis) and moderate amounts of a brightly eosinophilic, amorphous, fibrillar material (fibrin), extravasated red blood cells (hemorrhage) and moderate numbers of degenerated and viable neutrophils and macrophages. The lytic areas are surrounded by an irregular rim of hypereosinophilic hepatocytes with maintenance of cell borders, loss of cellular detail, nuclear fading and pyknosis (coagulative necrosis) with inflammatory cells previously described and few lymphocytes and plasma cells. Peripherally, the hepatocytes show vacuolation and intensely eosinophilic cytoplasm (degeneration) with numerous pale, filamentous, partly parallel or perpendicularly arranged (1x15µm) basophilic bacteria within hepatocytes. Multifocally, periportal and sinusoidal there is an infiltration with lymphocytes, macrophages, plasma cells and fewer neutrophils with low amounts of an eosinophilic homogeneous material within the connective tissue (edema) and intrahepatocellular, brightly yellow, pigmented material (bile pigment).

2. MORPHOLOGICAL DIAGNOSIS:
Liver: Hepatitis, necrotising, acute, multifocal, coalescing, severe, with intracellular bacilli, equine; [etiology consistent with *Clostridium piliforme*].

3. ETIOLOGY: *Clostridium piliforme*

4. NAME THE DISEASE: Tyzzer`s disease

MARKS:

- *descriptive features*	
Liver	1
Necrosis (lytic, coagulative)	2
Fibrin	1
Haemorrhage	1
Inflammatory cells (neutrophils, macrophages)	2
Inflammatory cells (lymphocytes, plasma cells)	1
Hepatocellular degeneration	1
Bacteria	1
Portal infiltrates (LC, macrophages, PL, NL)	2
Oedema	1
Bile pigment	1
- *diagnosis:*	2
- *etiology*	1
- *disease*:	1

style: 2