ECVP/ESVP Summer School in Veterinary Pathology

Marie Curie Training Courses

Summer School 2008 – Gastrointestinal ZH11

Slide No. ZH11, tissue from a PIG

1. Description of histopathological findings

1.1. Organ: Small intestine. The villi are moderately to severely shortened, club shaped and few are fused. Over the blunt and shortened villi as well as over the fused villi mostly cuboidal surface epithelium can be seen Intestinal crypts are mildly to moderately elongated and moderate to large amounts of mitotic figures in the epithelial crypt cells and higher up are visible (regeneration) interpreted as crypt hyperplasia. Multifocally to diffusely moderate amounts of lymphocytes and plasmacells and few neutrophils can be found in the mucosa.

Diagnosis: Moderate, diffuse, subacute enteritis with marked villi shortening and blunting with crypt hyperplasia and regeneration

Etiology: Viral infection (1), most likely Rotavirus (0.5) or Coronavirus (0.5)

Marks:

organ: small intestine	1
shortened, club shaped and few are fused (including description)	1
cuboidal surface epithelium	1
moderate to large amounts of mitotic figures	1
mucosal regeneration (crypt hyperplasia)	1
mild inflammation in submucosa	1
morphologic diagnosis	4
Style	2

1.2. Colon: Multifocal flattening and loss / sloughing (interpreted as erosion) of enterocytes is present as well as multifocal loss of colonic glands (interpreted as ulceration) that are replaced by cellular debris and inflammatory infiltrates composed of few to moderate numbers neutrophils, and few lymphocytes and plasma cells. Rarely glands contain small to moderate numbers of neutrophils (crypt abscess)*. The lamina propria is expanded by increased numbers of plasma cells and lymphocytes with few admixed histiocytes. Many bacterial colonies composed of 35µm long, slender bacilli cover the luminal surface and are found within the glands. On the luminal surface and within the lamina propria moderate numbers of large, round to ovoid, ciliated protozoal organisms measuring up to 60µm and containing a large ovoid to bean shaped basophilic nucleus are visible (Balantidium coli trophozoites). In addition multifocal small aggregates of lymphocytes and plasma cells are visible in the submucosa. *not in all sections

2. Morphologic diagnosis

moderate, chronic, lymphoplasmacellular colitis with multifocal erosions and ulcerations and intralesional protozoa (Balantidium coli) or: moderate, chronic-active erosive and ulcerative colitis with intralesional protozoa (Balantidium coli).

Marks:

organ: colon	1
erosion (including description)	1
ulceration (including description)	1
inflammation of the lamina propria (lymphocytes, plasma cells)	2
bacterial colonies (including description)	2
protozoa (including description and location)	3
mild inflammation in submucosa	1
morphologic diagnosis	4
Style	2