

Marie Curie Training Courses

Summer School 2005 – Urinary Tract Case 9

Case 9 (504-0669.2)	Points
<p>Species: Cat Organ: Kidney</p> <p>Description: The <u>whole capsule and 3/4 of the kidney (cortex and medulla)</u> is obscured due to <u>multifocally distributed necrotic areas (necrosis)</u> and a high amount of multifocally to diffusely arranged inflammatory cells. The capsule architecture and the upper cortex is lost due to necrosis of the tissue. <u>The necrotic areas are admixed with condensed chromatin, karyorrhectic and pyknotic neutrophils, as well as homogenous to fibrillar material (fibrin, coagulation necrosis).</u> In these areas only shadows of tubular structures are visible. <u>Vessel walls are eosinophilic and disrupted (fibrinoid changes).</u> On the edges of the necrotic areas <u>large amounts of karyorrhectic and pyknotic neutrophils, macrophages, plasmacells and lymphocytes</u> are visible. Some macrophages show intracytoplasmic erythrocytes (<u>moderate erythrophagocytosis</u>). The tubular structures are sometimes disrupted in these areas due to inflammatory processes. Multifocally vessels are also involved (<u>mixed vasculitis</u>). In the <u>interstitium</u> multifocally to diffusely clear blue material is seen (<u>interpreted as proteoglycans; edema</u>). In the pelvis around a <u>vein</u> a large amount of <u>macrophages</u>, without and with <u>erythrophagocytosis, lymphocytes and plasmacells</u> can be seen. At one point the inflammatory cells are found from the lumen to the adventitia (<u>transmurally; vasculitis</u>). In the medulla focally-extensive accumulation of erythrocytes is visible (<u>acute bleeding</u>), erythrocytes also engorge smaller vessels (<u>hyperemia</u>) and some macrophages and lymphocytes are also seen in the lumina of these vessels (<u>leucocytostasis</u>).</p> <p>Diagnosis: Severe, multifocal to coalescing necrotizing and pyogranulomatous nephritis with mixed cellular to fibrinoid vasculitis</p> <p>Etiology: Feline Coronavirus type 1</p> <p>Name of the disease: Feline Infectious Peritonitis</p>	