

Marie Curie Training Courses

Summer School 2005 – Urinary Tract Case 2

Case 2 (504-0421.2)	Points (20)
<p>Species: Dog Organ: Kidney</p> <p>Description: Most glomeruli show <u>global thickening of the glomerular basement membrane</u> and moderate <u>increased cellularity of mesangial cells</u>. Some glomeruli show adhesions between glomerular loops and the Bowman's capsule (<u>synaechiae</u>). <u>Bowman's capsules</u> are moderately to severely thickened and the <u>glomerular space</u> is sometimes enlarged and filled with homogenous, eosinophilic material (<u>protein</u>). Sometimes also blueish concretions are visible in the Bowman's space or the glomerular tufts at the basement membranes (<u>mineralization</u>). Only few glomeruli are completely hyalinized and eosinophilic and the glomerular loops adhered to the Bowman's capsule (<u>sclerotic glomeruli</u>).</p> <p>In the edematous <u>interstitium</u> multifocally a moderate to large amount of <u>plasmacells</u> and few <u>macrophages</u> are visible. <u>In the cytoplasm of the macrophages multiple, round, some 2micrometer big organism can be seen (protozoa interpreted as Leishmania)</u>.</p> <p>Some tubuli show homogenous, eosinophilic material in the lumen (<u>moderate proteinuria</u>) or are slightly dilated as well as few <u>tubular basement membranes</u> are severely thickened. In some tubular lumina mostly in the medullary region finely stippled or granular to compact dark blue material is found (<u>mineralization</u>).</p> <p>The cytoplasm of some tubular epithelial cells is foamy and show vacuoles (fat storage).</p> <p>Diagnosis: Severe, diffuse (generalized) and global membranoproliferative glomerulonephritis Moderate, multifocal plasmacellular interstitial nephritis with intrahistiocytic Leishmania</p> <p>Etiology: Leishmania sp. Leishmania donovani/infantum Leishmania chagasi (South America)</p> <p>Associated lesions: Skin: Dermatitis, plasmacellular and histiocytic. Alopecia around the eyes. Kidney: Chronic renal failure</p>	<p>2 points 1 point 2 points 1 point 1 point 3 points 2 points 1 point 4 points 1 point 2 points</p>