



# ECVP/ESVP Summer School in Veterinary Pathology



Summer School 2009 – Urinary Tract

Case 6 (S07-1472.2)	Points
<p><b>Species:</b> Dog <b>Organ:</b> Kidney</p> <p><b>Description:</b></p> <p>Throughout the kidney <u>tubular structures</u> are moderately to severely <u>dilated (up to 3mm in diameter)</u>, the tubular epithelia are compressed and flattened, in the lumen a slight amount of granular pale eosinophil material (<u>primary urin and protein</u>) and few <u>sloughed epithelial cells and macrophages</u> are present. Segmentally to diffusely a severe increase of fibrous tissue in the interstitium (<u>interstitial fibrosis</u>) is visible, in the fibrotic tissue <u>glomerula of different size, from mature to immature (increase of nuclear number, no developed glomerular loops)</u>, are found as well as randomly distributed some <u>lymphocytes and plasma cells and immature tubuli (epithelial cords without lumen)</u>. The <u>mature glomeruli</u> show <u>increased numbers of mesangial cells</u> and sometimes <u>thickened basement membranes</u>. (Some tubular epithelial cells show intracytoplasmic red globular material (<u>protein reabsorption</u>) and the same material in the lumina (<u>slight proteinuria</u>). In the wall of some tubuli and seldom in the interstitium blueish homogenous to granular depositions are present (<u>metastatic calcifications</u>).</p> <p><b>Diagnosis:</b></p> <p>Severe microcystic degeneration of the kidney with severe interstitial fibrosis and asynchronous differentiation of glomerula and tubules (nephrons)</p> <p>Slight focal global (membrano)proliferative glomerulonephritis</p> <p><b>Name the disease:</b></p> <p>Familial juvenile nephropathy</p>	