



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2007 – Avian Q6

Slide Q6: Tissue from a Hen

Tissue: Kidney

Description of the histologic findings:

In the kidney are randomly-located nodular foci, up to 1 mm in diameter, characterized by loss of tubular architecture, accumulation of hyperacidophilic cytoplasmic debris, hyperbasophilic nuclear debris with pyknosis and karyorrhexis (necrosis) and a moderate amount of heterophils and degenerate heterophils (suppuration). There are also dozens of 50- to 200-micrometer-diameter foci containing epithelioid macrophages and multinucleate giant cells (granulomas) centered on a radiated hyperacidophilic material (urate deposits, tophi). Tubules (especially collecting tubules) are occasionally dilated. Dilated tubules show nephrocyte necrosis, hematuria, cylindruria, or luminal accumulation of heterophils and/or crystals (urolithiasis). The interstitium is moderately expanded with edema, lymphocytes and plasma cells.

Morphologic diagnosis/diagnoses:

Multifocal chronic marked renal urate deposition and diffuse moderate tubulointerstitial nephritis with urolithiasis.

Name the condition:

Renal gout (visceral gout)

Key words and marks:

Tissue	1
Design	2
Description:	
Size of the necrotic foci	1
Necrotic foci: description (hyperacidophilia, pyknosis, karyorrhexis)	2
Degenerate heterophils within necrotic foci	1
Granulomas	1
Epithelioid macrophages	1
Tophi	1
Tubules: dilatation	1
Tubules: nephrocyte necrosis	1
Tubules; heterophils within their lumen	1
Crystals	1
Interstitium: oedema, lymphocytes, plasma cells	2
Morphologic diagnosis	3
Condition	1