

ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2012 – Mock Exam

Slide n° 2. Tissue from a cat

Description:

Kidney. Scattered tubuli in the cortex and medulla are moderately dilated and contain abundant large (100-400 µm), yellow-bright, glassy crystals, arranged in sheaves or rosettes in the lumen, consistent with oxalate crystals. In these, tubular epithelial cells are markedly flattened or lost. Multifocally, in cortex and medulla, tubular epithelial cells show hyperosinophilic cytoplasm and picnotic, kariorrhctic or kariolytic nuclei and slough into the tubular lumen (tubular necrosis). Rarely, there are also intraluminal neutrophils. Tubuli showing enlarged epithelial cells with cariomegaly (tubular regeneration) are also observed. In the interstitium there are multifocal areas of mild fibrosis with lymphoplasmacytic infiltrate and thickening of the glomerular capsules.

Morphologic diagnosis/es:

Multifocal, subacute, severe, tubular necrosis with intraluminal crystals. Multifocal, subacute, mild, interstitial lymphoplasmacytic nephritis.

Most likely etiology:

Ethylene glycol toxicity (oxalates)

Design

2

Tissue : Kidney

1

Descriptive features

Tubuli :

Tubular lumen in cortex and medulla (0,5) filled with/intraluminal (0,5):

1

Crystals (1): yellow-bright (1), size (1), shape (1)

4

Tubular epithelial necrosis (1)+ description (1), leukocytes (1)

3

Tubular regeneration

1

Interstitium:

1

Lymphoplasmacytic infiltrate

1

Fibrosis

1

Morphologic diagnosis/es

1. Multifocal subacute severe (0.5) tubular (1) necrosis (1) with intraluminal crystals (1).

4

2. Multifocal chronic mild interstitial lymphoplasmacytic nephritis (0.5).

1

Etiology : Ethylene glycol toxicosis (oxalates)

Total

20