



ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2014 – Toxicological Pathology (180)

Slide 5. H-4. (91-06175) Dog.

Description (12)

“Ballooning” degeneration of hepatocytes – cell swelling with compression of sinusoids, cytoplasmic clearing, nuclei not severely displaced (as with lipid vacuoles) (5)

Distribution: Multifocal to locally extensive (centrilobular and midzonal areas most affected) (3)

Hepatocytes contain brown- green granular material, also in Kupffer cells and periportal macrophages (2)

Also few foci inflammatory cells and possible thrombus (2)

Morphologic Diagnosis(es) (5)

Hepatocellular ballooning degeneration, centrilobular to midzonal, severe (4)

Intracellular cholestasis (1)

Differentials:

- glycogen accumulation
- severe fatty change but this is not vacuolar and nuclei not displaced.
- severe hydropic degeneration

Special stains of use

Glycogen – PAS

Lipid - Oil-red-O

Possible cause (3)

Glycogen accumulation due to excess corticosteroids - steroid hepatopathy

Source: Excess exogenous corticosteroid use or functional adrenal gland tumor

Clinical pathology:

Marked increase in glucocorticoid inducible alkaline phosphatase

Case information: 5yr old castrated male Labrador Retriever.

Gross findings: Liver was pale.

Treated with corticosteroids

Note: this lesion is fairly specific to the dog.