University of Mosul
Lecture No.: 1
College of Veterinary Medicine
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Unit of Scientific Affairs
Website: https://uomosul.edu.iq/veterinarymedicine/

Lecture title: Disturbances of Growth Cell Adaptation

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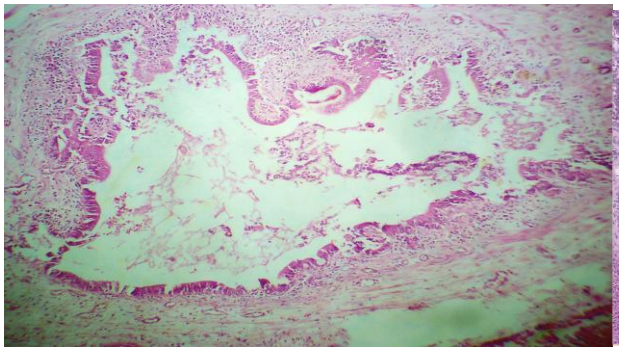
Diagnosis: Hyperplasia (Coccidiosis in rabbit).

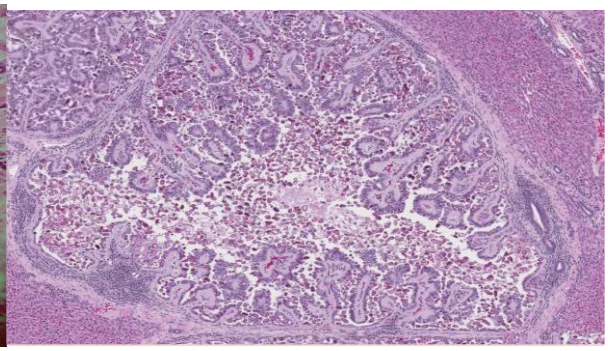
Organ: Liver, bile duct.

Stain: hematoxylin and eosin (H&E)

Lesions:

1. Presence of different stages of parasite (Coccidia) that leads to chronic irritation.
2. Increase in the number of epithelial cells lining the biliary canaliculi which appear as finger projection that lead to stenosis of the lumen.
3. Infiltration of inflammatory cells (eosinophils).





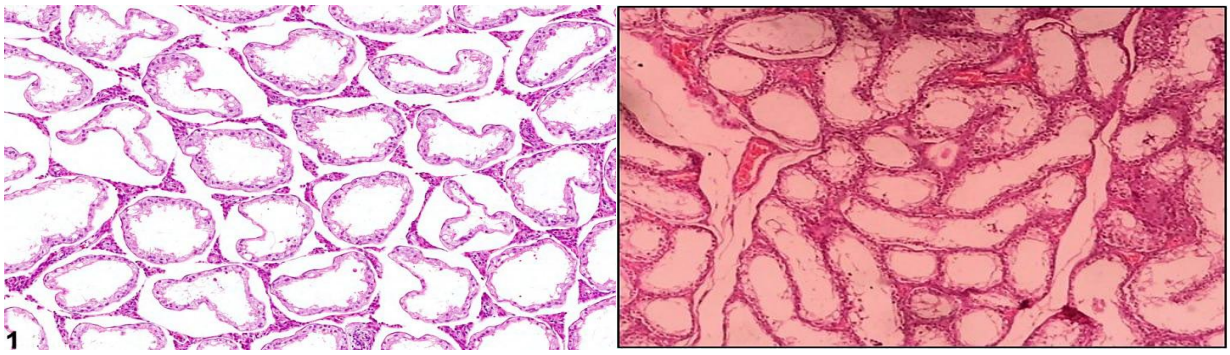
Diagnosis: Atrophy.

Organ: testes of rabbit.

Stain: H&E

Lesions:

1. Decrease in the number of seminiferous tubules.
2. Edema between seminiferous tubules.
3. Arrest of spermatogenesis & there are no sperms in the lumen of seminiferous tubules.
4. Different size and shape of seminiferous tubules.

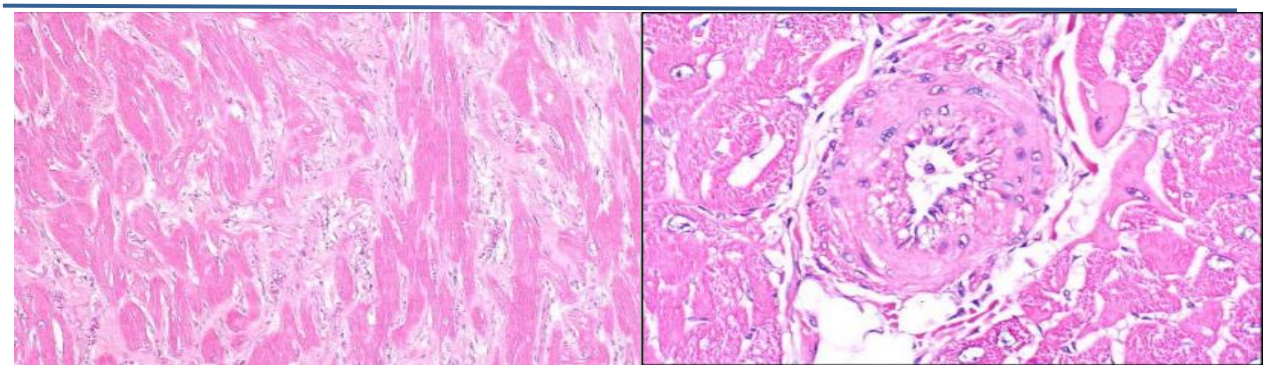


Diagnosis: Hypertrophy.

Organ: Heart.

Lesions:

1. Cardiomyocytes are irregularly arranged.
2. Cardiomyocytes are enlarged with abundant. eosinophilic cytoplasm and a large vesicular central nucleus.
3. The tunica media of intramyocardial vessels is expanded by hypertrophic smooth muscle cells.



Diagnosis: Metaplasia.

Organ: Liver.

Stain: H&E

Lesions:

1. Disappearance of normal architecture of hepatic tissue.
2. Transformation of hepatic tissue into fibrous tissue.
3. There is infiltration of mononuclear inflammatory cells.
4. Transformation of hepatic tissue to bone lamellae.