



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2005 – Fish F01/3377

Slide No. F01/3377: Tissue from a saltwater fish

Because of lack of material there are two different slide sets with the same tumor on different locations

Description of histological findings (1)

Spleen, there is a non encapsulated, well demarcated, densely cellular, expansive growing, 4 mm in diameter neoplastic mass. The multilobulated mass consists of epithelial cells, arranged in solid nests but also forming tubular structures with a lumen of varying diameter filled with deep eosinophilic, often fragmented, amorphous material (colloid). There is a scant amount of fibrovascular stroma. The neoplastic cells are cuboidal to high prismatic, in tubules filled with colloid they are flattened. They have indistinct cell borders and a moderate amount of eosinophilic cytoplasm. The nuclei of the epithelial cells are basally located, round to ovoid with stippled to dense chromatin and 1-2 nucleoli. Mitotic rate is low (<1/HPF). Anisocytosis and Anisokaryosis are low.

Additionally, in the splenic parenchyma there are multiple granulomas consisting of a central necrosis (cell and nuclear debris), surrounding histiocytes, fewer lymphocytes and an outer rim of fibroblasts.

Morphological diagnoses

Spleen, adenoma of ectopic thyroidea tissue

Spleen, granulomatous splenitis, severe, multifocal

Etiologies

Iodine deficiency

Mycobacterium marinum

Scoring system	Points
<u>General:</u>	
Design	2
Tissue	1
<u>Descriptive features:</u>	
Demarcation	0.5
Encapsulation	0.5
Expansive growing	0.5
Cellularity	0.5
Nests, tubules	1
Description of cells	4
Colloid	1
Mitotic rate	1
Granulomas	2
<u>Morphological Diagnoses:</u>	4
<u>Etiologies:</u>	2

Description of histological findings (2)

Kidney, there is a non encapsulated, well demarcated, densely cellular, infiltrative growing, 1 cm in diameter neoplastic mass. The multilobulated mass consists of epithelial cells, arranged in tubular structures with a lumen of varying diameter filled with deep eosinophilic, often fragmented, amorphous material (colloid). There is a scant amount of fibrovascular stroma. The neoplastic cells are cuboidal to high prismatic, in tubules filled with colloid they are flattened. They have indistinct cell borders and a moderate amount of eosinophilic cytoplasm. The nuclei of the

epithelial cells are basally located, round to ovoid, with stippled to dense chromatin and 1-2 nucleoli. Mitotic rate is low (<1/HPF). Anisocytosis and Anisokaryosis are low.

In the remaining parenchyma there are multiple granulomas consisting of a central necrosis (cell and nuclear debris), few surrounding histiocytes, lymphocytes and an outer rim of fibroblasts. These granulomas are also in the adjacent connective tissue and the gonad. Multiple renal tubular epithelial cells show deposition of eosinophilic hyaline droplets.

Morphological diagnoses

kidney, adenoma of ectopic thyroidea tissue

Kidney, granulomatous nephritis, moderate, multifocal

Etiologies

Iodine deficiency

Mycobacterium marinum

Scoring system	Points
<u>General:</u>	
Design	2
Tissue	1
<u>Descriptive features:</u>	
Demarcation	0.5
Encapsulation	0.5
Expansive growing	0.5
Cellularity	0.5
Tubules	1
Description of cells	4
Colloid	1
Mitotic rate	1
Granulomas	2
<u>Morphological Diagnoses:</u>	4
<u>Etiologies:</u>	2