



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2006 – Mock Exam Case 5

5. Tissue from a PIGEON

DESCRIPTION OF THE HISTOLOGICAL FINDINGS

Bursa of Fabricius.

The bursa of Fabricius shows diffuse, homogeneous and severe changes characterized by bursal atrophy, atrophy of bursal folds, and folding of the superficial epithelium.

The bursal follicles show an almost absence of lymphocytes (lymphocytic depletion), cortical thinning, and abundant involution cysts replacing the medullas. In both the cortex and medulla of follicles, the rare lymphocytes left and the macrophages are apoptotic. In the cortex of bursal follicles, the macrophages contain multiple grouped intracytoplasmic, basophilic viral inclusion bodies (circoviral inclusions). At the corticomedullary junction, the digestive epithelium is prominent and columnar (hypertrophy). The medullas are either replaced with involution cysts (up to 200 micrometers in diameter), or filled with macrophages (histiocytosis); the involution cysts are filled with a pale eosinophilic (proteinaceous) exudate, and sometimes contain viable and degenerate heterophils, necrotic debris and calcium deposits. In the superficial digestive epithelium, there are occasional involution cysts. The chorion of the bursa of Fabricius is expanded with hyperplastic fibroblasts (fibroplasia), accumulation of collagen fibers (fibrosis), and lymphoid aggregates. The serosa shows a focal moderate thickening with hyperemia, and the accumulation of macrophages, occasional lymphocytes and plasma cells, extravasated red blood cells (hemorrhages): focal peritonitis.

Also present, but not on all slides: foreign-body-type reaction in the medullas with multinucleated giant cells / abscess formation within some medullas.

MORPHOLOGIC DIAGNOSIS/DIAGNOSES

Diffuse (chronic) (severe) lympholytic (0.5) and histiocytic (0.5) bursitis (1) with involution and intramacrophagic circoviral inclusion bodies (1).

ETIOLOGIC DIAGNOSIS

Circoviral bursitis (1)

MARKS

Bursa of Fabricius	1
Bursal atrophy	1
Lymphocytic depletion	1
Macrophages (1): viral inclusion bodies (1), cytoplasmic (1), basophilic (0.5), grouped (0.5)	4
Corticomedullary junction: hypertrophy, or prominence.....	1
Involution cysts (1) in the medullas: heterophils (1), calcifications (1)	3
Stroma (chorion): fibroplasia or fibrosis (1) and lymphoid aggregates (1)	2
Serosa: thickening, macrophages or lymphocytes	1
Morphologic diagnosis.....	3
Etiologic diagnosis.....	1
Design	2