



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2007 – Cytology Case 3

Case #3 – C1652/03

DOG

Pleural effusion (direct smear)

Cytologic description

The smear is a well preserved, slightly blood contaminated with some naked nuclei, highly cellular sample with a mixed population of cells with large prevalence (>90%) of neutrophils. They have moderate degenerative changes (mostly karyolysis) and very common bacterial phagocytosis (mixed population of cocci, bacilli and filamentous bacteria). Bacteria are dispersed in the background as well. There, filamentous bacteria sometimes form very large, deep basophilic aggregates (up to 300-400µ).

Large macrophages and reactive mesothelial cells, individual or in small groups, occasionally multinucleated, are also present.

Score

Style	(2 points)
Blood and naked nuclei	(1 point)
High cellularity	(1 point)
Mixed population of cells	(1 point)
Prevalence of neutrophils	(1 point)
Karyolysis	(1 point)
Bacterial phagocytosis	(1 point)
Mixed population of bacteria	(1 point)
Cocci, bacilli, filamentous	(2 points)
Bacterial aggregates	(1 point)
Macrophages	(1 point)
Reactive mesothelial cells	(1 point)
Multinucleation of mesothelial cells	(1 point)

MD

Severe subacute to chronic purulent (neutrophilic) septic peritonitis with intralesional bacteria
(3 points)

Etiology

Nocardia spp./Actinomyces spp. (2 point)
