



ECVP/ESVP Summer School in Veterinary Pathology



Summer School 2009 – Clinical Pathology 19

10 years old German shepherd dog living outdoor presented with fever, anorexia and enlarged abdomen, due to fluid accumulation.

Physico-chemical analysis of the effusion: Yellow-orange, turbid, with an evident cell pellet after centrifugation.

Total proteins = 2,8 g/dL, SG = 1037; cells = $11,4 \times 10^3/\square$ l

Cytological description

Sample of poor quality with good cellularity and mild hemodilution but with several artefacts (smudged cells, nuclear debris)

A mixed population of inflammatory cells, with prevalence of degenerated neutrophils with severe signs of karyolysis and karyorhexis is present. Several neutrophils contain intracytoplasmic phagocitized bacterial, mostly round shaped and (cocci) but occasionally also morphologically consistent with bacilli.

Small lymphocytes, naked nuclei and macrophages are also present.

Cytological diagnosis:

Inflammatory effusion, most likely purulent

Comment:

The presence of phagocytized bacteria and the numerous degenerated neutrophils are consistent with the diagnosis of a septic effusion. This hypothesis is supported also by the physico-chemical characteristics of the fluid. Bacteriology should be performed, followed by an antibiotic sensitivity test.

SCORING:

Comments on cellularity, background and artefacts	1 pt
Prevalent population: neutrophils	1 pt
Degeneration	1 pt
Description of bacteria	1 pt
Other cells	0,5 pts
Cytological diagnosis	1 pt
Comment (bacteriology)	1 pt
TOTAL	6,5 pts