ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2009 – Clinical Pathology C125

History:

12 years old mongrel dog (spayed female) with anorexia and diarrhoea followed by constipation. X rays showed a diffuse thickening of some intestinal tract. Clinical signs suddenly disappeared after steroid therapy but one month later an abundant effusion suddenly developed.

CBC, biochemistry, serum protein electrophoresis WRI

Physico-chemical analysis of the effusion: yellow, transparent, total proteins = 1,4 g/dL, SG = 1015; cells = 2,4 x 10^3/□ l

Cytological description

High cellularity and good quality of the sample.

The prevalent population is composed by large pleomorphic round cells, most likely of lymphoid origin. These cells have a scant to moderate basophilic cytoplasm, often with few small vacuoles and/or with scattered fine purple granules. The nuclei are round to oval (12-30 microns) often indented or folded, rarely irregularly shaped and are characterized by a finely reticular chromatine with rare inconspicuous nucleoli. Binucleated lymphoid cells are also present; although this could be an artefactual change occurred during preparation of the cytological sample. Rare mitoses (sometime atypical or bizarre) are also present.

Additional cell populations include frequent small lymphocytes without morphological abnormalities, occasional large macrophages some of which have intracytoplasmic phagocytised cellular debris. Rare neutrophils and plasma cells can be detected.

Cytological diagnosis:

Round cell tumour, most likely lymphoma

Comment:

Immunophenotyping or other molecular techniques are suggested to classify the type of lymphoma. Specifically a pasic panel of lymphocyte markers (CD3 or CD5, CD4, CD8, CD21/79a) eventually associated with additional leukocyte markers (CD18, CD45) or PCR techniques to assess clonality should be performed.

ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2009 – Clinical Pathology C125

SCORING:	up to
Comment on cellularity:	0,5 pts
Prevalent cell population = large lymphoid cells	1,0 pt
Correct description of cytoplasmic features	0,5 pts
Correct description of nuclear features	1.0 pts
Binucleated cells	0.5 pts
Additional cell populations:	1 pt
Cytological diagnosis:	1 pt
Comment	
Additional techniques	0,5 pts
Correct list of antibodies	0,5 pts
TOTAL	**6,5 pts**