



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2007 – Cytology Case 1

Case #1 – PP1000/02

DOG

Neck mass (scraping)

Cytologic description

The smear, mildly blood contaminated and with a proteinaceous background, is highly cellular and composed of a mixed population of cells with large prevalence (>95%) of variably sized clusters of epithelial small (10 μ), tightly cohesive, often palisading cells with a very high N/C ratio (basal cells). The nucleus is round, central to paracentral, with finely stippled to coarsely granular chromatin and one, small, indistinct nucleolus. Occasional nuclear molding. Mitosis are rare. Cytoplasm is scant, grey to light blue and omogeneous. Some cells have a more basophilic, glassy cytoplasm (keratinisation).

Mild anisocytosis and anisokaryosis.

Some reactive spindle cells are commonly present between epithelial clusters with a variable amount of filamentous to fine granular, purple material (mesenchymal extracellular matrix). Rare macrophages, mast cells and lymphocytes.

Score

Style	(2 points)
Blood, proteinaceous background	(1 point)
High cellularity	(1 point)
Prevalence of epithelial cells	(1 point)
High N/C ratio (basal cells)	(1 point)
Nuclear features	(2 points)
Nuclear molding	(1 point)
Cytoplasmic features	(1 point)
Keratinisation	(1 point)
Mitosis	(1 point)
Anisocytosis/anisokaryosis	(1 point)
Reactive spindle cells	(1 point)
Mesenchymal matrix	(1 point)
Macrophages, mast cells, lymphocytes	(2 points)

MD

Benign epithelial tumor (most likely trichoblastoma)	(3 points)
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