



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2007 – Cytology Case 4

Case #4 – 1221/03

DOG

Skin mass (scraping)

Cytologic description

The smear is a well preserved, with some blood contamination, good cellular sample. There is a mixed population of cells with large prevalence (>90%) of a pleomorphic population of variably sized (up to 40-60 μ in length), spindle shape cells. They are often arranged in rows (“windrowing”) in a finely granular to fibrillar, purple background (extracellular matrix). The cells have poorly defined margins and moderate to high N/C ratio. The nucleus is centrally placed, round to oval, with granular chromatin irregularly clumped. Nucleoli are indistinct. Binucleated cells are present. Rare atypical mitotic figures. The cytoplasm is granular, basophilic, with occasional, multiple, small, clear vacuoles. Moderate to high anisocytosis and anisokaryosis. Many capillary structures and some well granulated mast cells are present.

Score

Style	(2 points)
Good cellularity	(1 point)
Prevalence of spindle cells	(1 point)
Rows formation	(1 point)
Background	(1 point)
N/C ratio	(1 point)
Nuclear features	(3 points)
Binucleated cells	(1 point)
Mitosis	(1 point)
Cytoplasmic features	(2 points)
Anisocytosis/Anisokaryosis	(1 point)
Capillaries	(1 point)
Mast cells	(1 points)

MD

Malignant spindle cell tumor (most likely myxosarcoma)	(3 point)
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