



# ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2012 – Cytology

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## Case #1

Signalment: Dog, poodle, SF, 15yrs

Sample: spleen

## Description of cytological findings

Adequate staining. The smear is highly cellular with a mixed population of cell.

Large prevalence of highly cohesive cellular clusters.

Cells are of variable size (15-20 microns) with indistinct cell borders inside groups, high N/C ratio, and light blue cytoplasm with occasional small, clear vacuoles. Nuclei are round to oval, 2-3 erythrocytes in diameter, with granular chromatin and indistinct nucleoli. Mitotic figures are rare. Anisocytosis and anisokaryosis are moderate.

Inside or at the periphery of these groups, there are occasional, large (40-100 micron in diameter), low N/C ratio, round cells with distinct cell borders, irregularly shaped, central condensed nuclei (pyknosis) and abundant cytoplasm filled with tiny, clear vacuoles (mature sebocytes).

Foamy macrophages are sometimes present.

Erythrocytes (blood contamination), naked nuclei, spindle mesenchymal cells (fibroblasts) and some aggregate of purple extracellular matrix (ECM) are present.

## Score

Design	(2 points)
High cellularity	(1 point)
Mixed population	(1 point)
Prevalence of cellular clusters	(1 point)
High N/C ratio	(1 point)
Nuclear features	(3 points)
Cytoplasmic features	(2 points)
Mitosis	(1 point)
Sebocytes	(2 points)
Anisocytosis/anisokaryosis	(1 point)
Macrophages	(1 point)
Blood contamination/naked nuclei/mesenchymal cells/ECM	(2 points)

## MD

Spleen metastasis of sebaceous cell carcinoma	(2 points)
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