

ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2012 – Cytology

H93-3072

Shi Tzu, 14 years, female

Skin, thorax, sharply demarcated, lobulated, grey nodule

Imprint

Description

A moderate number of ovoid to spindled (to stellate) cells (interpreted as mesenchymal) is present. They are evenly spread over the smear. About 1/3 is artificially damaged (to intense pressure while spreading the cells) and nuclear as well as cytoplasmic streaming is visible. Cells are isolated or arranged as small bundles and are mildly to moderately pleomorphic. The cytoplasmic-to-nuclear ratio is some times increased. The cells are medium sized with round to ovoid nuclei (diameter usually 10-12µm) and have a moderate amount of greyish (depending on the smear also bluish or even reddish) wispy / veil-like / undulating cytoplasm containing small optical empty vacuoles (rarely few small purple granules can be seen). Cell borders are indistinct. One to multiple, often hardly visible nucleoli are present. The chromatin is dense to finely reticular. There is mild variation of the C/N ratio and mild to moderate variation of the nuclear size (anisokaryosis). No mitotic figures are seen. Rarely double nucleated cells are present. The background population consists of numerous erythrocytes.

Diagnosis

Skin: Spindle cell sarcoma of low malignancy, most likely haemangiopericytoma

Score

Design	2
Moderate cell number	1
Artificial cell destruction / nuclear streaming	1
Spindled cells	1
Isolated and bundles	1
Low to moderate pleomorphism	1
Cytoplasmic vacuoles	1
Undulating / veil-like / wispy	1
Indistinct cell borders	1
Dense to finely reticular chromatin	1
Multiple nucleoli, indistinct	1-2
No mitotic figures	1
Double nuclei	1
Diagnosis: sarcoma of low malignancy / haemangiopericytoma	1