



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2005 – Reproductive System B-859/04-L

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TISSUE FROM A DOG

Mammary gland

There is a nodular (1,5x1 cm), moderately cellular, well-demarcated, encapsulated neoplasm in the dermis with two types of proliferative cells (epithelial and myoepithelial cells).

Epithelial cells are closely packed forming tubules and myoepithelial cells are loosely arranged in nests and whorls and immersed in a mucin-filamentous basophilic extracellular matrix (myxoid areas). Some of these areas show, at the periphery, a basophilic densification with less filamentous aspect (early cartilaginous matrix). The stroma around the myoepithelial cells is moderately abundant while the stroma surrounding the epithelial cells is moderately fibrous and scarce.

m), cuboidal or columnar, □ Epithelial neoplastic cells are small (15-20 with distinct cell borders, a moderate acidophilic cytoplasm, and a central round to elongate nuclei with clumped chromatin and a small basophilic nucleolus in a low number of cells. Myoepithelial cells are medium size m), spindle or stellate cells, with distinct cell borders, small amount □ (20-30 of acidophilic to clear cytoplasm with round or elongate, medium to large, clear nuclei with finely stippled chromatin showing 1 or 2 nucleoli.

The myoepithelial cells show anisocytosis and anisokaryosis. The mitotic index is low with less than 1 mitotic figure per HPF.

Multifocal small round to elongate inflammatory aggregates of lymphocytes and plasma cells are seen in the stroma together with scattered macrophages containing a granular brown pigment (hemosiderin). Multifocally, adipocytes are seen among the neoplastic cells forming small to medium groups. Focally, a group of apocrine glands is immersed in the tumour.

Morphological diagnosis: Complex adenoma of the mammary gland