



ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2010 – Mammary Tumours 29817D

Cat

Within the subcutis and almost completely effacing the mammary gland there is an infiltrative, not well demarcated, not encapsulated, 2 cm in size nodular lesion that focally infiltrate the dermis and displace the cutaneous adnexa and focally extend to the cut borders (not evident in all slides). The nodule is composed of a population of neoplastic epithelial cells disposed in irregular tubular structures and occasionally in nests associated with incomplete fibrovascular septa. The cells are cuboidal, from 20 to 30 micron in size with not well defined cell borders, moderate amount of clear eosinophilic cytoplasm, occasionally presenting clear vacuoles and a round to ovular nucleus, from 15 to 25 micron in size with marginated to finely stippled chromatin and a frequently evident nucleolus. The anisocytosis and anisokaryosis are moderate.

There are up to 3 mitotic figures per HPF, occasionally atypical. Numerous nests and tubules of neoplastic cells infiltrate the adipose tissue at the periphery of the nodule and are surrounded by marked fibrocollagenous tissue (desmoplastic reaction). Aggregates of lymphocytes are multifocally evident. At the periphery of the nodule there are numerous ectatic lymphatic vessels often containing neoplastic tubular structures (vascular invasion). In the deep portion of the subcutis the lymph node parenchyma is almost completely effaced by the neoplastic population (lymph nodal metastasis).

MD:

Mammary gland, tubulosolid carcinoma with vascular invasion and lymph nodal metastasis, *Felis catus*