



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2008 – CNS Case 32

Case 32) S 3336/98 Tissue from a DOG

Cerebellum: The slide shows a multilobular, densely cellular, well demarcated, unencapsulated, infiltrative mass, measuring about 1 cm in diameter, which does not extend to cut borders. The mass is located in the white matter of the cerebellum. The cells are arranged in closely packed lobules and cords, forming tubular and acinar structures. There is a moderate amount of a highly vascularized fibrous stroma. The cells are cuboidal to columnar with distinct cell borders and measure 10 x 10 µm to 10 x 20 µm in diameter. The cells possess a moderate amount of a finely granular, eosinophilic cytoplasm. The nucleus to cytoplasm ratio is 1:1 to 1:2. The centrally to basally located, round to oval nucleus has a finely stippled chromatin pattern with an equal amount of eu- and heterochromatin. Each nucleus contains 1 – 2, distinct, basophilic nucleoli. The cells show a mild anisocytosis and anisokaryosis. Mitoses range from 0 to 2 per high power field with rare bizarre mitoses. The tubular structures formed by the tumor cells contain a moderate amount of an amorphous, eosinophilic material (protein-rich fluid). Multifocally there are large areas with loss of architecture, cellular debris and karyorrhexis and karyolysis in the remaining cells (necrosis). There is neovascularization and compression atrophy of the adjacent brain parenchyma.

Morphological diagnosis:

cerebellum, metastatic (mammary gland) adenocarcinoma