ECVP/ESVP Summer School in Veterinary Pathology

Marie Curie Training Courses

Summer School 2008 – CNS Case 6

Case 6) S 2491/99 f:
Tissue from a SEAL

Cerebellum: There is multifocal, segmental necrosis of the molecular and the granular layer with loss of tissue architecture and accumulation of cellular debris. Within these areas, granular cells, Purkinje cells and glial cells show karyorrhexis and pyknosis of nuclei as well as hypereosinophilic cytoplasm. In the overlying leptomeningeal segments and expanding along the perivascular spaces (Virchow-Robin`s space) into the necrotic gray matter, there is diffuse infiltration of numerous macrophages with large amounts of foamy cytoplasm and fewer lymphocytes. An increased number of capillaries is present in the surrounding cerebellar neuroparenchyma (capillary proliferation). The white matter adjacent to the necrotic areas shows mild vacuolation with a moderate number of spheroids.

Morphologic Diagnosis:
Cerebellum: Polioencephalomalacia, multifocal, severe, acute to subacute.

Cause:

Vitamin B deficiency.