



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2008 – CNS Case 20

Case 20) S 3483/99: Tissue from a BOVINE

Cerebrum: Meninges are severely and diffusely extended by large numbers of neutrophils and variable numbers of macrophages. Additionally, there is multifocal accumulation of an eosinophilic, acellular, fibrillar material (fibrin) and an eosinophilic, acellular, homogenous material (edema fluid). The adjacent submeningeal cerebral parenchyma shows a mild to moderate perivascular to diffuse infiltration of neutrophils and macrophages, associated with mild perivascular to diffuse edema. Large numbers of neutrophils are degenerated, characterized by homogenous, eosinophilic cytoplasm with fragmented, basophilic (pyknotic) nuclei. The majority of small- to medium-sized meningeal vessels are markedly filled with erythrocytes (congestion). Parenchymal vessels exhibit additionally leukocytostasis. Occasionally, thrombosis of meningeal vessels is present.

Morphologic diagnosis:

Cerebrum: Leptomeningitis, diffuse, fibrino-suppurative, severe, subacute

Etiology:

Bacterial infection (septicemia) *Salmonella Typhimurium*