

# in Veterinary Pathology



# **Marie Curie Training Courses**

Summer School 2008 - CNS Case 13

# Case 13) S 1307/94 P: Tissue from a HORSE

Cerebrum with hippocampus: There is a severe diffuse leptomeningial and perivascular infiltration with lymphocytes, plasma cells and histiocytes partly forming multilayered perivascular cuffing accentuated in the gray matter. Within the gray matter and predominantly in the hippocampal region there is a spongiform appearance of the neuroparenchyma with malacia, neuronal degeneration and necrosis, and neuronophagia. Brain stem nuclei and the white matter are hypercellular, characterized by diffuse to focal accumulation of elongated microglial cells (microgliosis) as well as severe astrogliosis. Additionally, there is moderate axonal swelling (spheroids) around brain stem nuclei. Rarely there are intranuclear slightly eosinophilic small (Cowdry type B) inclusions within neurons.

## Morphologic diagnosis:

Cerebrum: Polioencephalitis, lympho-histiocytic, diffuse, severe, subacute with intranuclear inclusion bodies Cowdry type B

## **Etiology:**

Borna disease virus