



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2004 – CNS 1307-94

SLIDE No. 1307-94: Tissue from a HORSE

DESCRIPTION OF HISTOLOGIC FINDINGS

Caudal brain stem/medulla oblongata; there is moderate to severe, perivascular infiltration of lymphocytes, plasma cells and macrophages predominantly in the gray matter. 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. Individual neurons show central chromatolysis (Neuronal degeneration) or shrunken, hyper eosinophilic cytoplasm with pyknotic nuclei (Neuronal necrosis). Occasionally, neuronophagia is present. Additionally, there is moderate axonal swelling (Spheroids) around brain stem nuclei. There is prominent periventricular, perivascular infiltration of lymphocytes, plasma cells and macrophages.

Morphologic diagnoses:

Brain stem; lymphoplasma-histiocytic perivascular polioencephalitis with gliosis and neuronal degeneration and necrosis, diffuse, subacute to chronic, severe

Etiology:

Borna disease virus

Scoring System

Slide description:

Design	2 points
Tissue (brain stem, medulla oblongata)	1 point

Descriptive features:

Severe perivascular infiltrates	2 points
Lymphocytes, plasma cells, macrophages	1 point
Severe	1 point
Gray matter	1 point
Astrogliosis	2 points
Microgliosis	2 points
Neuronophagia	1 point
Meningeal infiltrates	2 points

Total: 15 points

MORPHOLOGICAL DIAGNOSIS/DIAGNOSES:

4 points

ETIOLOGY:

1 point