



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2004 – CNS 1643-99

SLIDE No. 1643-99: Tissue from a PIG

DESCRIPTION OF HISTOLOGIC FINDINGS

Three cross-sections of spinal cord; there is prominent perivascular infiltration of lymphocytes, macrophages and occasional plasma cells in the central gray matter, adjacent white matter and meninges. Additionally, the gray matter exhibits a multifocal to diffuse microgliosis and astrogliosis. Few randomly distributed necrotic neurons characterized by shrunken, eosinophilic cytoplasm with pyknotic nuclei and associated glial cell proliferation (neuronophagia) are present. Few axons are moderately swollen and eosinophilic (spheroids), with mild myelin sheath swelling. In the white matter minimal, randomly distributed focal astrogliosis is present. There is minimal perivascular to diffuse lymphohistiocytic infiltration of the meninges. The majority of vessels in the meninges and spinal cord are moderately filled with erythrocytes (congestion).

MORPHOLOGIC DIAGNOSIS/DIAGNOSES:

Spinal cord; lymphoplasmahistiocytic perivascular meningomyelitis with gliosis, neuronal degeneration and necrosis, diffuse, subacute to chronic, moderate

ETIOLOGY:

Porcine enterovirus (Teschovirus), family Picornaviridae

Scoring System

Slide description:

Design	2 points
Tissue (spinal cord)	1 point

Descriptive features:

Perivascular gray and white matter and meningeal involvement	2 points
Most prominent in the gray matter	1 point
Lymphocytes, macrophages, plasma cells	1 point
Glial nodules	2 points
Astrogliosis	1 point
Gliosis (microgliosis)	1 point
Neuronophagia	2 points
Spheroids	1 point
Congestion	1 point
Total:	15 points
MORPHOLOGICAL DIAGNOSIS/DIAGNOSES:	4 points
ETIOLOGY:	1 point