



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2004 – Mock Exam Case 1

Slide No. 1: Tissue from a SHEEP

1. DESCRIPTION OF HISTOLOGICAL FINDINGS

Cerebral hemisphere with hippocampus and lateral ventricle. Within the gray and white matter of the cerebrum blood vessels are intensely filled with erythrocytes (hyperemia) and there is a multifocal perivascular, predominantly perivenous (within Virchow-Robin) infiltration by moderate numbers of lymphocytes, macrophages and plasma cells (perivascular cuffing), focally extending into the parenchyma. The parenchyma appears cell rich, predominantly due to microglial cells (microgliosis). Neurons of the hippocampus (both granular and pyramidal cells) contain single to multiple, variably sized (up to appr. 7 μm in diameter), round to ovoid, homogeneously eosinophilic cytoplasmic inclusion bodies (Negri bodies). [There are single neurons with shrunken nuclei and eosinophilic cytoplasm (necrosis).] The leptomeninx is diffusely infiltrated by low numbers of lymphocytes, macrophages and plasma cells. [The slide contains a fragment of pineal gland with focal mineralisation.]

2. MORPHOLOGICAL DIAGNOSIS:

Panencephalitis and leptomeningitis (meningoencephalitis), lymphohistiocytic/mononuclear/non-suppurative/non-purulent, diffuse, moderate, with numerous neuronal intracytoplasmic inclusion bodies (Negri bodies)

3. NAME THE DISEASE: Rabies

4. ETIOLOGY: Rhabdovirus

MARKS:

cerebrum, hippocampus	1
- <i>descriptive features:</i>	
grey and white matter	1
perivascular infiltration	1
increased cellularity parenchyma	1
microgliosis	1
diffuse/disseminated	1
inflammatory cells (lymphocytes, macrophages and plasma cells)	3
Vircho-Robin space	1
cytoplasmic eosinophilic inclusion bodies	1.5
Negri bodies	0.5
etiology	1
disease	1
morphological diagnosis	4
style:	2