



# ECVP/ESVP Summer School in Veterinary Pathology



## Marie Curie Training Courses

Summer School 2008 – CNS Case 8

### Case 8) S 695/06 A1: Tissue from a BOVINE

Cerebrum: In the leptomeninges and in the perivascular regions (Virchow-Robin`s space) of the cerebral cortex, there is a moderate, diffuse infiltration of histiocytic cells with a large amount of foamy to granular cytoplasm (gitter cells). The inner neuronal layers of cortical gray matter show a laminar area of neuronal necroses characterized by dark eosinophilic neurons with shrunken nuclei. The surrounding neuropil has a diffuse spongiform appearance (edema) with partial loss of tissue architecture (malacia) and contains numerous gitter cells. Within the necrotic areas and in the overlying cortical layers, there is an increased number of capillaries and small blood vessels with hypertrophic endothelial cells present. Surrounding white matter neuroparenchyma shows numerous hypertrophic astrocytes (astrogliosis).

### Morphologic diagnoses:

Cerebrum:

- 1) Polioencephalomalacia, laminar, diffuse, severe, subacute
- 2) Meningitis, histiocytic, diffuse, severe, subacute

### Name the disease:

Cerebrocortical necrosis (CCN)

### Cause:

Vitamin B1 (thiamine) deficiency