



# ECVP/ESVP Summer School in Veterinary Pathology



## Marie Curie Training Courses

Summer School 2004 – CNS 3483-99

SLIDE No. 3483-99: Tissue from a BOVINE

### DESCRIPTION OF HISTOLOGIC FINDINGS

Brain; meninges are massively, diffusely extended by large numbers of neutrophils and variable numbers of macrophages. Additionally, there is multifocal accumulation of an eosinophilic, acellular, fibrillar material (fibrin) and an eosinophilic, acellular, homogenous material (edema fluid). The adjacent submeningeal cerebral parenchyma shows a mild to moderate perivascular to diffuse infiltration of neutrophils and macrophages, associated with mild perivascular to diffuse edema. Large numbers of neutrophils are degenerated, characterized by homogenous, eosinophilic cytoplasm with fragmented, basophilic (pyknotic) nuclei. The majority of small- to medium-sized meningeal vessels are markedly filled with erythrocytes (congestion). Occasionally, thrombosis of meningeal vessels is present.

### MORPHOLOGIC DIAGNOSIS/DIAGNOSIS:

Brain; fibrinosuppurative meningoencephalitis, diffuse, acute, severe

### MOST LIKELY ETIOLOGY:

*Escherichia coli*, *Salmonella typhimurium*

## Scoring System

### Slide description:

Design	2 points
Tissue (brain, meninges)	1 point

### Descriptive features:

Meningeal involvement	1 point
Large numbers of neutrophils and macrophages	2 points
Fibrin	1 point
Edema	1 point
Submeningeal infiltration	1 point
Neutrophils and macrophages	2 points
Perivascular and diffuse	2 points
Degenerated neutrophils	1 point
Thrombosis, occasionally	1 point
Congestion	1 point
	<b>Total: 16 points</b>

MORPHOLOGICAL DIAGNOSIS/DIAGNOSES: 2 points

MOST LIKELY ETIOLOGY: 2 points