



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2005 – Fish R04/1826

Slide No. R04/1826: Tissue from a trout

Description of histological findings

Kidney, multifocal to coalescing there is a marked hyperplasia of the haematopoietic tissue accompanied by displacement and partial reduction of excretory elements. The interstitium is infiltrated with large amounts of macrophages, fewer lymphocytes and there is a moderate proliferation of fibroblasts (fibrosis). Multifocally there are small areas of necrosis. Within the lesions there are numerous round cells with a diameter of 10-20 μm , an amphophilic cytoplasm and single or multiple (up to 3) eosinophilic, spherical inclusions which are 5 μm in diameter and surrounded by a clear halo (daughter cells); interpreted as extrasporogenic stages of *Tetracapsuloides bryosalmonae*. Multiple tubuli are filled with desquamated epithelial cells and few oval organisms measuring, appr. 5x10 μm , which contains two basophilic nuclei (interpreted as myxozoan (*Sphaerospora*) spores).

Morphological diagnoses:

Kidney, granulomatous interstitial nephritis, multifocal to coalescing, severe with multiple myxozoan parasites

Kidney, myxozoan spores in renal tubuli

Etiology:

Tetracapsuloides bryosalmonae

Disease:

Proliferative kidney disease (PKD)

Scoring system	Points
<u>General:</u>	
Design	1
Tissue	1
<u>Descriptive features:</u>	
hyperplasia of the haematopoietic tissue	2
macrophages, lymphocytes in interstitium	2
fibrosis	1
necrosis	1
parasite description	2
description of daughter cells	3
parasites in tubular lumina	1
<u>Morphological Diagnoses:</u>	2
<u>Etiology:</u>	2
<u>Disease:</u>	2