



ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2010 – Emerging Infectious Diseases Case 17

Vole

History:

This animal was caught in a study on the prevalence of endemic pathogens in wild rodent populations in Scotland.

Gross Findings:

Subcutaneous granuloma on right shoulder, enlarged spleen, multifocal granulomatous pneumonia.

Histology: Tissue from a field vole (*Migrotus agrestis*).

1. DESCRIPTION OF HISTOLOGIC FINDINGS

Lung. The pulmonary architecture is widely replaced by multifocal to coalescing consolidated areas comprised of macrophages/epithelioid macrophages interspersed with neutrophils, with central areas of caseous necrosis (represented by complete focal loss of cellular and nuclear detail with focal presence of cell debris) (granulomas). Within the centre and at the border of necrotic areas are multiple small dark purple, round and layered, partly amorphous structures both cell-free and occasionally within epithelioid macrophages (dystrophic mineralisation).

In addition, there are multifocal peribronchial and perivascular lymphocyte aggregates (activated bronchus-associated lymphatic tissue).

2. MORPHOLOGIC DIAGNOSIS

Lung, granulomatous pneumonia, multifocal, severe

3. ETIOLOGY: *Mycobacterium microti*