



ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2014 – Gastrointestinal Tract

N12-437-2 (ignore the kidney section with mesangial glomerulopathy and interstitial nephritis).

A 4 year-old stray dog with a traumatic femoral fracture- incidental finding in the intestine.

A slightly oblique section of intestine is examined. The muscle layers are thick with large leiomyocytes (hypertrophy). The mucosa has long, normal villi with artifactual (postmortem) loss of apical enterocytes with little infiltrate of the lamina propria except multifocally at the base of villi at one edge. At this edge, 150-200µ, parasite eggs with a crenelated shell and containing a miracidium (Schistosome eggs) are surrounded by macrophages as a 1-3-layer ring or as a zone about multiple eggs. A histiocyte-rich, with live and degenerate neutrophils, some eosinophils, lymphocytes and plasma cell infiltrate expands the lamina propria in these areas. Associated crypts contain cell debris. Eggs in the submucosa are surrounded by a similar histiocytic/granulomatous inflammatory reaction. The inflammatory nodules are linear (reflecting a vein association, presumed) and surround whole or degenerating fragments of eggs. A perivascular, eosinophilic histiocytic and lymphocytic response is focally prominent in vessels of the serosa and outer muscle layer. One vein is infiltrated (phlebitis).

Mdx: Intestine: Multifocal histiocytic/granulomatous enteritis with eosinophilic histiocytic phlebitis; schistosome eggs.

Etiology: *Heterobilharzia americanum*.