



ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2014 – Gastrointestinal Tract

N11-0380-7. An 8 month-old, Australian Heeler bitch with diarrhea and one month of weight loss

A cross section of colon is examined. The mucosal crypts are variable separated [1] by an infiltrate of large macrophages [2] containing 5 to >10, 2-5 μ , ovoid, yeast like organisms with a <2 μ , basophilic nucleus and a thin cell wall with a thin, surrounding clear space [3] (*Histoplasma capsulatum*, presumed). A mild, lymphocytic and plasmacytic infiltrate accompanies the macrophages especially in the deeper lamina propria [2]. Goblet cells are increased (hyperplasia) as are intraepithelial lymphocytes [2]. The mucosa is not ulcerated. Submucosal lymphoid tissue is expanded with separated cells (lymphoid hyperplasia and edema), and at the periphery of follicles are macrophages with organisms (mwo)[2]. The submucosa is widened by rarified tissue (edema) and many small vessels lined by plump endothelium and thinly coated with spindle shaped adventitial cells and variable numbers of mwo, a few lymphocytes and foci of variable numbers of neutrophils [2]. The muscle layers are intact but traversed by small, reactive vessels like above with minimal lymphocytic cuffing and rare macrophages [1]. Myenteric plexes have a mild pleocellular infiltrate. The serosa and mesocolon have a mild, nonsuppurative infiltrate especially around vessels and rare mwo. Larger vessels have cellular coagulae.

MDx: [4] Colon: Histiocytic/granulomatous colitis; goblet cell and lymphoid hyperplasia; mild serositis/peritonitis; numerous intrahistiocytic yeasts

Etiology: [2] *Histoplasma capsulatum*.