



# ECVP/ESVP Summer School in Veterinary Pathology

## Summer School 2014 – Gastrointestinal Tract

N08-382-4. An 8 year-old gelding with 3 months weight loss. A colonic mass is palpated ~70cm from the rectum.

Colon: An irregularly rectangular piece with no recognizable natural borders and having two ends of suppurative necrosis is examined. Beginning at one end is a zone of necrotic neutrophils (pmn) that makes up ~30% of the section that blends into an epithelial proliferation that is inducing fibroplasia. Tall columnar cells with indistinctly bordered, eosinophilic cytoplasm and an oval, hypochromatic, vesiculate nucleus with finely granular euchromatin and 1-3 nucleoli proliferate in a crowded fashion on a basement membrane, and nuclei occupy the lower 3 fourths of cells (crowding and some loss of polarity). Mitoses are 1-3/hpf. These neoplastic cells extend from the necrotic end into developing connective tissue as fronds and rings. The connective tissue has a diffuse, mild, pmn infiltrate, and pmn exocytose through the epithelium such that neoplastic rings often contain necrotic pmn. Deeper ringlets have a piling of cuboidal cells with less organization (anaplasia). These anaplastic ringlets often circumscribe necrotic debris. The center of the section has proliferating, parallel vessels in immature connective tissue (granulation tissue); some large arteries with irregular convoluted medial walls (rechannelized, presumed); and islands of lymphoid tissue with a few siderophages. The granulation ends at a band of mature connective tissue (preexisting tissues, presumed). Then, neoplastic fronds recur and line spaces full of necrotic pmn, protein and cell debris. At the opposite end, neoplastic fronds lie over trabeculae of partially calcified bone with osteocytes and some osteoclasts (bone metaplasia) with surrounding highly vascularized connective tissue with a pleocellular infiltrate that terminates in a zone of necrotic pmn and cell debris.

Mdx: Colon: Colonic adenocarcinoma with bone metaplasia, necrosis and suppurative inflammation.