

# ECVP/ESVP Summer School in Veterinary Pathology

## Summer School 2010 – Mock Exam Case 7

### Tissue from an Iguana

#### Stomach

The gastric mucosa is moderately hyperplastic with prominent mucosal folds. There are nests of hyperplastic branching glands extending deep into the lamina propria. The lamina propria and submucosa is mildly edematous. Multifocally to diffusely at the apical surface of epithelial cells of the surface mucosa and gastric glands there are numerous round, intracellular but extracytoplasmic trophozoites that measure 3-5 micrometer (also accepted: protozoan) (Cryptosporidia). Only few chief cells are still visible; most of them are replaced by mucous neck cells (mucous hyperplasia). Diffusely in the epithelium and lamina propria there are moderate to large numbers of infiltrating lymphocytes, with a few heterophils (mixed inflammation) as well as large numbers of erythrocytes within blood vessels (congestion).

At another surface there is a focally extensive region of complete loss of epithelial cells (ulceration). The underlying propria is comprised of hypereosinophilic cells with loss of cellular detail, and pyknotic or lost nuclei (necrosis of the lamina propria down to the muscularis mucosae). This necrotic debris is admixed with eosinophilic fibrillar material (fibrin), degenerate and viable heterophils, erythrocytes and a few macrophages. At the ulcerated surface there are numerous large colonies of coccoid, basophilic bacteria. In the submucosa, there are large clear spaces (edema).

#### Morphologic diagnosis / diagnoses

**Gastritis**, lymphoplasmacytic and **hyperplastic** (also accepted: proliferative), moderate, chronic with intralesional protozoa (**cryptosporidia**) **Gastritis, ulcerative** (or: necrotizing, or: fibrino-necrotizing), focally–extensive, subacute with intralesional coccoid **bacteria**

#### Main etiology

*Cryptosporidium serpentis*

#### Marks

Stomach.....	1
Hyperplastic mucosal folds.....	1
Mucous hyperplasia .....	1
Protozoans / trophozoites.....	1
Apical surface .....	0.5
Round .....	0.5
3 to 5 micrometers .....	1
Lymphocytes.....	0.5
Intra-epithelial .....	0.5



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In the lamina propria .....	0.5
Mixed inflammation .....	0.5
Ulceration / loss of epithelial cells.....	1
Necrosis and description.....	1
Fibrin and description.....	1
Heterophils .....	1
Bacterial colonies .....	0.5
Coccioid .....	0.5
Edema.....	0.5
Congestion.....	0.5
Morphologic diagnosis.....	3
Main etiology.....	1
Style .....	2