

ACUTE NECROTISING ENTERITIS IN A CHATTERING LORY (*Lorius garrulous*) (CASE 666.1)

CASE HISTORY

Adult female chattering lory (*Lorius garrulous*) found dead.

GROSS PATHOLOGY

External examination: No visible lesions.

Marked dehydration, Muscle mass: excellent, Fat deposits: abundant subcutaneous and abdominal fat stores.

Internal findings: The crop is distended with nectar and fruit pulp. The coelomic membranes are remarkably dry and mildly opaque. The duodenum is distended with foul smelling clear liquid that contains occasional flocculent material. The duodenal mucosa has a granular, erythematous, and tiger-striped appearance. The colon contains normal faecal material. The liver may be mildly enlarged. There are multiple small petechial haemorrhages along the capsular surface of the left liver lobe. The ovary appears small and inactive.

HISTOPATHOLOGY

Lesions are not evident within the following tissues: brain, ovary, kidney, skin, trachea, pancreas.

Ventriculus: Bacterial colonies are scattered throughout the koilin layer.

Spleen: The splenic parenchyma is well populated with lymphoid tissue. There is multifocal fibrinoid necrosis of the media of the medium and large sized arteries.

Small intestine: Many segments of the small intestine have intact mucosa and luminal acid haematin and bacteria. There is extensive acute necrosis of the villar mucosa throughout one duodenal sample (Fig 1). A carpet of robust bacilli infiltrate the necrotic tissue (Fig 2).

Lung: The pulmonary parenchyma is congested and there is mild perivascular oedema.

Myocardium: The pericardial sac is focally adherent to the epicardium.

Liver: The portal tracts contain small mononuclear cell aggregates (Fig 3, 4). Erythrophagocytosis is prominent within the sinusoids. Hepatocytes contain small quantities of cytoplasmic brown pigment.

MICROBIOLOGY

Liver: *Escherichia coli* 1+

Kidney: *Escherichia coli* 3+, *Clostridium perfringens* 1+

Small intestine: *Escherichia coli* 3+, *Pseudomonas* sp. 1+
Candida sp. 1+

Duodenal scraping and wet preparation: no significant findings.

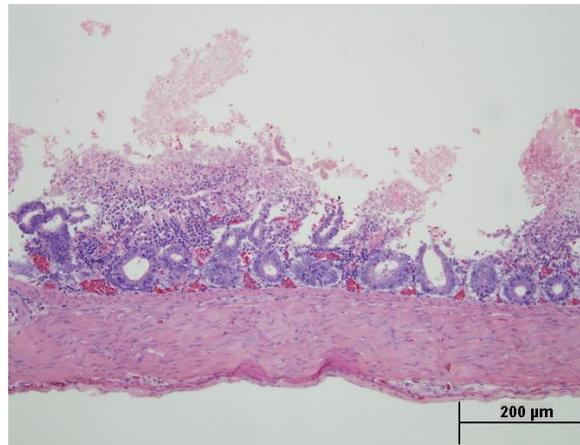


Fig 1. Small intestine, necrosis of mucosa. H&E 20x

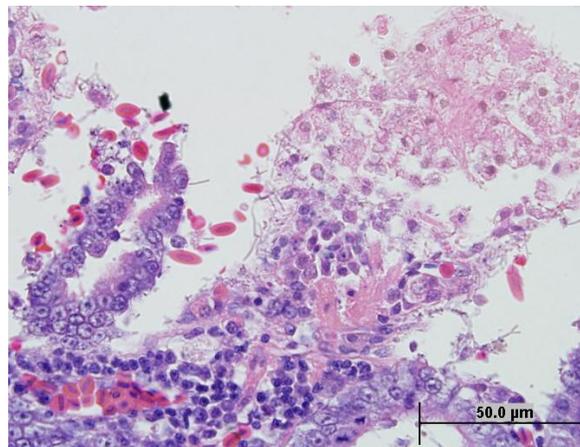


Fig 2. Bacilli, small intestine. H&E 100x

MORPHOLOGICAL DIAGNOSIS

Necrotising duodenitis

Marked dehydration

Focal hepatic haemorrhages

COMMENTS

The Lory appears to have died as a result of a very acute

intestinal infection. *E. coli* and *Clostridia* were cultured from the intestinal tract and kidney, thus it appears that the bird was terminally bacteraemic. The fibrinoid necrosis of blood vessel walls within the spleen is suggestive of concurrent toxæmia. Periportal hepatic inflammation may be due to bacteria or antigens arriving haematogenously, or via the biliary tree. *E. coli* and *Clostridia* are suspected as the cause of necrotising enteritis in rainbow lorikeets and king parrots at approximately this time of year.

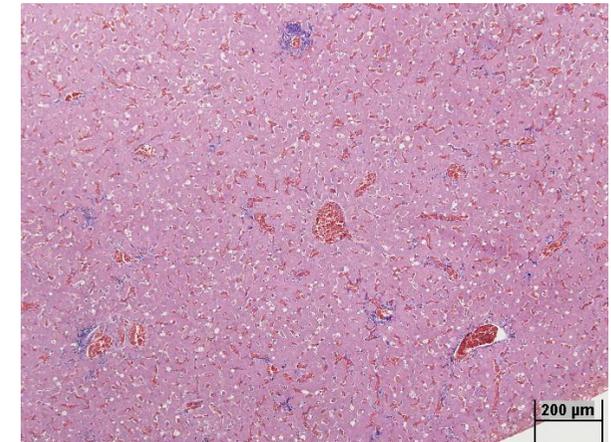


Fig 3. Periportal infiltrate, liver. H&E 10x

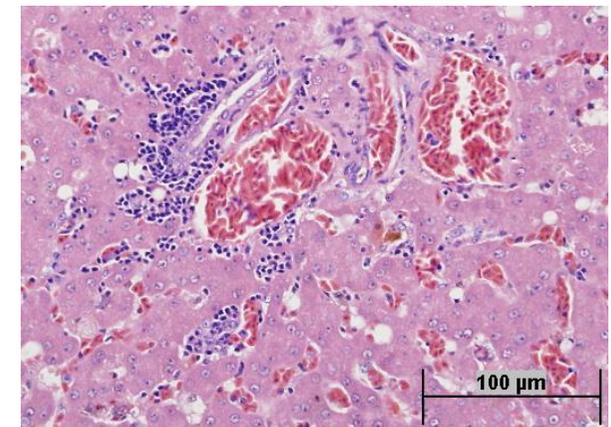


Fig 4. Periportal infiltrate. Liver H&E 40x

REFERENCES

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