

SYSTEMIC COCCIDIOSIS, CLAMOROUS REED WARBLER (*Acrocephalus stentoreus*) (CASE 4541.1)

CASE HISTORY

Juvenile male clamorous reed warbler, found dead.

GROSS PATHOLOGY

External examination: no visible lesions.

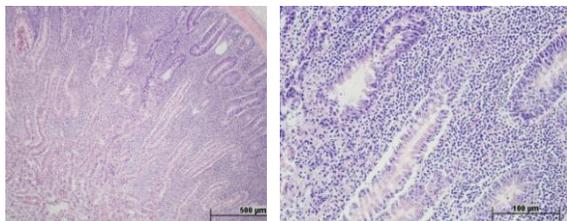
Hydration and muscle mass: good. Fat deposits: absent

Internal examination: The liver and spleen are both markedly enlarge and mottled. The testes are small.

HISTOPATHOLOGY

Lesions are not evident within the following tissues: Lung, pancreas, kidney, ventriculus, myocardium

Small Intestine: The intestinal mucosa is mildly autolytic. The lamina propria contains diffuse moderate to marked infiltrates composed of lymphocytes and plasma cells, and other small mononuclear cells. The mucosa contains moderate to marked numbers of mucosal coccidial gametocytes and small numbers of schizonts. Under examination with 100x objective, numerous mononuclear cells within the lamina propria contain singular round cytoplasmic organisms with a very small, central nucleus.



a) b)
Fig 1. Small intestine. H&E a) 10x, b) 40x

Spleen: The splenic parenchyma is mildly autolytic. The parenchyma contains no visible lymphoid cuffs or follicles. Perivascular reticuloendothelial cells are prominent.

Proventriculus: There are mild serosal perivascular mononuclear cell aggregates.

Lung: The pulmonary interstitium contains increased numbers of lymphocytes, plasma cells and heterophils, particularly within the perivascular parenchyma.

Oesophagus: the serosa contains multifocal perivascular aggregates of lymphocytes, plasma cells and heterophils, which resemble haematopoietic tissue.

ZN stain: No acid fast bacteria are evident.

Case interpretation: Karrie Rose. Photography and case construction: Damien Higgins

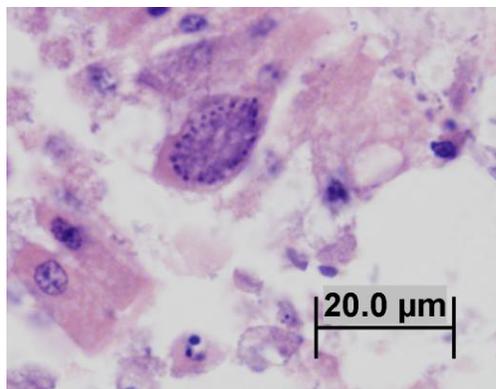


Fig 2. Coccidial macrogametocyte. H&E 100x

PARASITOLOGY

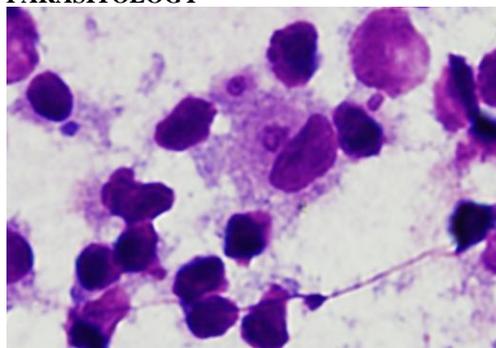


Fig 3. Impression smear, spleen. Diff Quik 100x

Splenic impression smear: the sample is highly cellular and composed of a mixture of mononuclear cells and smaller numbers of erythrocytes. Multifocal lymphocytes and monocytes contain cytoplasmic oval organisms with slightly eosinophilic cytoplasm and small, dense, round nucleus. These organisms are also evident in extracellular locations. Small bacilli are scattered throughout the background material. The organisms are non-pigmented quite large and no ring forms are evident (coccidian?)

MORPHOLOGICAL DIAGNOSIS

Hepatosplenomegaly

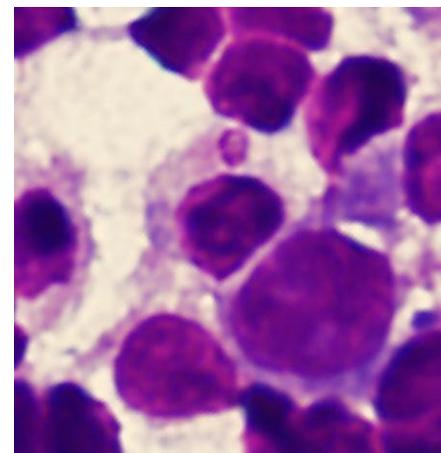


Fig 4. Impression smear, spleen. Diff Quik 100x

Marked non-suppurative enteritis- coccidian
Marked extramedullary haematopoiesis and hepatomegaly - systemic coccidiosis

COMMENTS

The bird has a non-suppurative enteritis associated with prevalent mucosal coccidia. Small intracellular organisms are also evident within mononuclear cells within the intestinal lamina propria and hepatic sinusoids and on a splenic impression smear. The presence of the organism within mononuclear cells, and the morphology of the organism is consistent with systemic coccidiosis. Although systemic coccidiosis has been reported in several species of passerines, this is an unusual finding in this species and collection.

REFERENCES

ROSSI, G. PERRUCCI, S. TACCINI, E. VITALI, C. G. BRACA, G. RENZONI, G. Mortality in black siskins (*Carduelis atrata*) with systemic coccidiosis. Journal of Wildlife Diseases. 1997. 33(1): 152-157.

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