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Short Communication

HEPATOZOON CANIS IN A PUP - A CASE REPORT

Canine hepatozoonosis, caused by the protozoan, *Hepatozoon canis,* is characterised by clinical signs like fever, muscle pain, weakness, gait abnormalities, vomition, diarrhoea and epileptic convulsions with neutrophilic and monocytic leucocytosis. However, the organism could be found even in healthy animals. (Craig, *et al.*, 1978; Barton *et al.*, 1985 and Kalra *et al.*, 1989). In India, *H. canis* has been described and found to be more in corss-bred dogs and male dogs (Bentley, 1905; James, 1905 and Latha, 1990). This report of the occurrence of *H. canis* in a pup forms first of its kind from Kerala.

A Labrador male pup aged 45 days (Case No. C 6731) was presented to the Medical Unit, Veterinary Hospital, Thrissur with a history of severe vomition and blood tinged diarrhoea. A few ticks were present on the body and they were identified as *Rhipicephalus sanguineus.* Results of laboratory investigation indicated the presence of ova of *Ancylostomum caninum* (++) in the faeces. The complete blood count revealed high neutrophilic response with the other parameters in the normal range. Nearly 40.00 per cent of the circulating leucocytes showed the presence of *H. canis* gamonts (Wright's stain). They were surrounded by a delicate transparent capsule and stained pale blue with a number of pink granules in the cytoplasm.

The pup was treated with Sulpha-trimethoprim (Biotrim(R)) @ 30 mg/kg body weight and 5.00 per cent Dextrose-normal saline @ 20 ml/kg body weight intravenously. Pyrantel pamoate @ 5mg/kg body weight was administered orally for the treatment for ancylostomes. The condition of the pup improved the next day. Differential count of blood smears revealed almost normal values. Gamonts of *H. canis* were identified in about 10.00 per cent of the leucocytes. Sulpha and fluid therapy was repeated for five days. The animal had totally recovered, when it was presented for check-up two weeks later. The blood smears revealed *H. canis* organisms in just 1.00 to 2.00 per cent of the cells.

It was understood that the pup was bought from Madras, where *H. canis* is widely prevalent (Latha, 1990). The pup might have contacted the infection either by transplacental route, (Craig *et al.*, 1978) or by ingestion of the dog tick, *R. sanguineus. Hepatozoon canis* is not virulent as a pathogen, but its presence may aggravate the existing weak condition of the animal and lead to a clinical disease (Barton, *et al.*, 1985). There is a school of thought (Ruprah, 1985), that a third component may be necessary to aggravate the clinical disease in dogs, like hookworms, which was also found in the present case.

Summary

The presence of *Hepatozoon canis* in the blood smear of a pup, with a history of vomition and diarrhoea and its successful treatment is reported.

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