J Krishi Vigyan 2022, 11 (SI) : 102-103 DOI : 10.5958/2349-4433.2022.00082.4

Short communication

Clinical Management of *Babesiosis* in a Mongeral Dog - A Case Report

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ABSTRACT

A six- month old non descriptive male pup presented with the history of anorexia, vomiting and haematuria. Physical examination revealed pyrexia (103.5° F), increased heart rate and respiratory rate and yellow discolouration of the mucous membrane. Haematological and Serum Biochemical analysis were made. Based on history, clinical examination and laboratory findings it was confirmed as *Babesiosis* with immune mediated haemolytic anaemia. The case was treated based on diagnosis and made an uneventful recovery.

Key Words: *Babesiosis*, Haematuria, Pup, Serum.

INTRODUCTION

Canine babesiosis is a tick-borne disease with worldwide distribution and global significance. Canine babesiosis was caused by *B. canis* (large *Babesia*) and *B. gibsoni* (small *Babesia*) (Jesus *et al,* 2020). It is the most prevailing vector borne haemo parasite of dogs in India (Riyaz *et al*, 2019). Hard ticks are the main vectors for *Babesia* spp. within the tick, *Babesia* spp. undergo the sexual conjugation and the sporogony portions of their life-cycles (Gallego *et al*, 2016).

CASE HISTORY AND OBSERVATION

A six- month old non descriptive male pup weighed 12 kg was presented to Veterinary Clinical Complex, VCRI, Udumalpet with the history of anorexia, vomiting and haematuria. Physical examination revealed pyrexia (103.5° F), Tachycardia (162/min), increased respiratory rate (36/min). Visible mucous membrane and lower abdominal skin region revealed diffuse moderate yellow discolouration. Blood sample was collected for complete blood profile and serum biochemical analysis. Smear prepared from peripheral blood smear. Haematology revealed severe anaemia viz. Hb: 6 g/dL, RBC – 1.8 x 10 6, PCV – 22% and platelet – 60,000. Pheripheral blood smear examination revealed the presence of *Babesia canis*. and more spherocytes. Except elevated total bilirubin (2.01 mg/dL) other biochemical parameters were within the normal range.

TREATMENT AND DISCUSSION

The animal was treated with DNS 10ml/kg (i/v), Inj.Prednisolone 1mg/kg (i/m), Inj. Diminazene aceturate 2.5mg/kg (Deep i/m), and Inj. Oxytetracycline 20mg/kg diluted with Distilled water (i/v). From day two Tablet. Clindamycin 25mg/kg BID, Tablet. Doxycycline 10 mg/kg OD and Tablet. Metronidazole 15mg per kg BID were given along with Tab. Prednisolone 1mg/kg BID and Tab. Ranitidine 0.5mg/kg BID, Syrup. Dexorange, Syrup. Silymarin and Syrup. Thrombup each 0.5ml/kg were given orally for three weeks. Prednisolone dose was tapered from 1 mg to 0.5 mg/kg after second week. Haematology and Serum

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Fig 1. Dog – yellow discolouration of caudal ventral abdomen

Fig 2. Dog – Icteric Penile mucous membrane

Fig 3.Dog - Icteric Oral Mucous Membrane

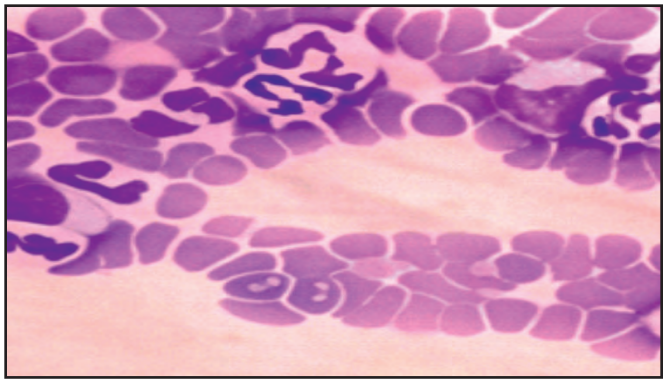

Fig 4. Blood smear showing abesia *Canis*

biochemistry analysis were made after treatment. The results showed near normal value and animal recovers uneventfully. *Babesia spp* mostly affect the young dogs (Schoeman *et al*, 2009). Blood smear seems to be a easiest and most accessible diagnostic test for most veterinarians in India (Riyaz *et al*, 2019) Immune mediated haemolytic anaemia is commonly observed in Babesiosis (Day, 2012). In the case of *B. canis*, diminazene aceturate often fails to eliminate parasites Hence attempts were made to treat this condition by triple antibiotic therapy doxycycline (5 mg/kg, orally, twice daily), clindamycin (25 mg/kg, orally, twice daily), metronidazole (15 mg/kg, orally, twice daily) (Koster *et al*, 2015) gave a favourable prognosis.

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Received on 10/05/22 *Accepted on 22/08/22*