BABESIOSIS: A CASE REPORT IN CATTLE

R.K. Saini¹ and *L.N. Sankhala²

¹Veterinary Officer, Govt Veterinary Hospital, Lalpur, Jhunjhunu
²Assistant Professor, Department of Pharmacology and Toxicology,
College of Veterinary and Animal Science, RAJUVAS, Bikaner-334001
E-mail: ¹doc.rameshsaini@gmail.com , ²allensankhala@gmail.com (*Corresponding Author)

Abstract: Nondescriptive cow aged around 3-4 years with history of high fever, restlessness, dull and decreased appetite and red colored urine was brought. Babesiosis was diagnosed on the basis of history of animal, presence of ticks on body and clinical symptoms. Animal was successfully treated with berenil, oxytetracycline LA, meloxyplus, butorphosphon and cyanocobamin.

Keywords: Ixodidae, Intraerythrocytic, Morbidity.

Introduction

Babesiosis is a tick-borne, intraerythrocytic protozoan parasitic infection that causes significant morbidity and mortality in wide range of domestic and wild animals and occasionally man. It is the most important disease of cattle worldwide and transmitted by blood-sucking ticks of the Ixodidae family (hard ticks). The most prevalent species, Babesia bovis and B. bigemina, are found throughout most tropical and subtropical regions. By means of the universal distribution of the ixodid tick, Babesiosis is the second most widespread blood-borne disease of animals (Homer et al., 2000; Hunfeld et al., 2008, Gohil et al., 2013) and, prominently, is gaining increasing interest as an emerging zoonosis of humans (Homer et al., 2000; Kjemtrup and Conrad, 2000; Zintl et al., 2003; Hunfeld et al., 2008; Leiby, 2011; Gohil et al., 2013). The economic losses from these two organisms can be considerable, particularly in developing countries.

History and Clinical Signs

Nondescriptive cow aged around three to four years was brought with history of high fever, restlessness, dull and decreased appetite and red colored urine. On clinical examination of animals, mucous membrane was pale and animal was voiding red coloured urine which was collected in bottle. Animal was very depressed and dull. On physical examination of cow ticks were found on body of animal.
Diagnosis
Based on the history, spot observation, nature of clinical symptoms and presence of ticks on body of animal, it was tentatively diagnosed as babesiosis and after giving treatment to animal, on the basis of response showed by animal to treatment, it was finally diagnosed as babesiosis.

Treatment and discussion
Animal was given Berenil 5% (Diminazene Aceturate) injection at the dose rate of 1 ml/20 kg, intramuscularly. Berenil is an antiparasitic drug for treatment and control of protozoa infection in cattle, sheep, horses and dogs. Along with berenil, oxytetracycline LA 25 ml, meloxyplus 25 ml were also given and butorphosphon plus cyanocobamin 20 ml given intramuscularly as a supplement for iron and vitamin to increase RBC formation.

References
Photograph

Animal voiding red coloured urine