CLINICO-THERAPEUTIC MANAGEMENT OF ACUTE THEILERIOSIS IN A COW CALF

Vandna Bhanot, O.P. Mehla and Kamaldeep
Disease Investigation Laboratory
Lala Lajpat Rai University of Veterinary and Animal Sciences
Near Court Road, Ambala City-134 004
Received 23.02.2014 Accepted 28.06.2014
Corresponding Author : vandana.van@gmail.com, drkamal1981@yahoo.com

Tropical theileriosis is a disease of global economic importance in cattle, caused by the tick borne protozoan parasite *Theileria annulata,* and transmitted by ticks of the genus *Hyalomma* (Brown, 1997; Preston, 2001). The parasite is a serious constraint to cattle poduction in endemic areas, causing lethal infections in exotic cattle and considerable mortality in indigenous as well as crossbred stocks (Forsyth *et al*., 1997). A case of an acute tropical theileriosis in a 2 months old cow calf was reported and its successful treatment is discussed in present study.

Case History and observations:

The blood sample using EDTA as anticoagulant from cow calf (Holstien Friesian crossbred) of 2 months age was bought to Disease Investigation laboratory, Lala Lajpat Rai University of Veterinary and Animal Sciences, Ambala City with history of fever, loss of appetite, dullness, restlessness, depression and with no response to antibiotic and antipyretics. Haematological profile (Hb-4 g/dl, TEC-2.3×10^6/µL, TLC- 8.6×10^3/µL, and DLC- N-31%, L-66%, M-2%, E-1%) revealed marked anemia and lymphocytosis.

Clinical examination of the animals revealed high rise of temperature (105 ^{O}F), restlessness and rough coat, increase in heart and respiratory rate, pale mucous membrane, tense eye ball and enlargement of superficial lymph nodes. Microscopic examination of Giemsa stained blood smear showed round/oval intraerythrocytic bodies resembling with typical Theileria organisms and large number of Koch's Blue Bodies (KBB) in lymphocytes .

Treatment and Discussion:

The calf was treated with single dose of Inj. Buparvaquone @ 2.5 mg/kg b.wt I/M. Injection Avil (Chlorephenaramine maleate 10 mg/ml), Ferritas (Iron Sorbitol 50 mg + Folic acid 500 mcg + Hydroxycobalamin Acetate 50 mcg/ml), Stronic (Thiamine hydrochloride) were administered @ 1 ml SID for 5 days. Injection Melonex plus (Meloxicam 5 mg and Paracetamol 150 mg/ml) @ 1 ml SID was administered for 3 days only.

The clinical signs and pyrexia disappeared within 3 days of treatment (Sumathi and Veena, 2012). After 4th day blood smear examination revealed complete absence of piroplasm in erythrocytes.The efficacy of the therapy was judged on the basis of clinical recovery and absence of haemoprotozoan in blood smear. Zahid *et al*. (2005) and Sarma *et al.* (2008) reported 93-100% efficacy of buparvaquone against bovine theileriosis when used in combination of supportive and symptomatic therapy as done in present study.

REFERENCES:

Brown, C. G. D. (1997). *Trop*. *Anim. Health Prod*. **29 (4):** 1–3.

Forsyth, L. M. G., L. A. Jackson, G. Wilkie, A.Sanderson, C. G. D. Brown and P. M.

Preston, P. M. (2001). The Encyclopedia of Arthropod transmitted infections, 1st Ed. CABI Publishing, Wallingford (UK) pp. 487–504.

Sarma, G.V.K, Reddy, S.U.M., Subrahmanyam,P., Murthy, S.S., Rao, T.M. and Krishna , P.G. (2008). *Intas Polivet***. 9**:64-66.

Sumathi, B.R. and Veena, M.P. (2012). *Indian Veterinary Journal.* **89**: 82-83.

Zahid, I.A., Latif, M. and Baloch, K.B. (2005) *Pakistan Vet. J*.**25**:137-139. ❑