HAEMATO BIOCHEMICAL CHANGES IN A CASE OF CANINE TRYPANOSOMIASIS

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Trypanosomiasis (Surra) is an important protozoan disease caused by Trypanosoma evansi. It is widely distributed in tropical and subtropical regions. It is insect borne and their epidemiology is determined by the ecology of insect vector. Surra in dogs is characterized by high mortality and morbidity and anemia which has been recorded as a consistent finding in infected dogs. (Prabhakar et al., 1971). Some alteration in serum biochemistry including hypoglycemia, decreased albumin, globulin was also observed with infected dogs. (Aquino et al., 2002).

The present study was to evaluate the hematological and biochemical alterations in a dog infected with Trypanosoma evansi.

A six year old male nondescript dog was presented to the Veterinary Teaching Hospital of Madras Veterinary College with a history of diarrhoea and emaciation. On physical examination the dog had a body temperature of 104° F, pulse rate 98 per minute, respiratory rate 23 per minute, loss of body weight, lacrimation, nasal discharge and the conjunctival mucous membrane was pale with bilateral corneal opacity.

Galhotra et al. (1986) also observed similar clinical signs such as increased temperature (101.8-107.4 F Ú) with increased pulse rate (85-104)

Serum biochemistry analysed by colorimetric method using MISPA EXCEL chemistry analyzer showed BUN of 15.80 mg/dl, creatinine 2.87mg/dl, SGPT 4.83 I.U/l, total protein 6.27g/1, albumin 1.88 g/ 1 cholesterol 197.08mg/dl, glucose 33.99 mg/dl potassium 3.94 mmol. Amongst these blood glucose was found to be low. Kulkarni (1994) also observed low blood glucose (27.33 mg/dl) in buffaloes. The metabolic products and toxin liberated may be the reason for low blood glucose and glycogen reserve due to hepatic changes. In addition it is established that trypanosomes utilize a large amount of glucose.

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**REFERENCES**


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TAMIL NADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY
Bioinformatics centre and ARIS cell, Madras Veterinary College, Chennai-7

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<td>02-09-2009 to 22-09-2009</td>
<td>“Bioinformatics and its Applications in Animal Health and Veterinary Research”</td>
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