

Babesiosis in a Lioness (*Panthera leo*)

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Babesiosis is a tick born infectious hemoprotozoan disease caused by babesia species and is clinically characterized by pyrexia, a haemolytic anemia, haemoglobinurea, jaundice and death. (Arora 1994).

Case History, Clinical Examination

Lioness named Ganga aged about thirteen years of age belonging to Rana Pratapo Singh Zoo, Sangli. (MS) was examined on 7.1.2002 with case history revealed that lioness was sick from 2.1.2002 with symptoms of dullness, weakness, inappetance, lethargic and mild paresis of hindquarter. History revealed that animal was treated symptomatically with antibiotics and supportive drugs, but remained refractory.

The animal was again examined on 13.1.2002 by transferring into squeeze cage. The body temperature was found to be 102°F, tachycardia severe dehydration, weakness, complete hindquarter paralysis was noted, hematobiochemical investigations in course of sickness revealed Hb 9 gm percent, DLC includes Neutrophil 84, lymphocytes 12, monocytes 4 and eosinophils 0, PCV 32 percent and presence of very few babesia species organisms in peripheral blood smear. Blood urea was 205 mg/dl, serum creatinine 7.1 mg/dl, SGOT 95.59 IU/L, SGPT 89 IU/L and CPK 3530 IU/L.

Results and Discussion

The present case under study did not show typical signs of babesiosis such as pyrexia, jaundice and hemoglobinurea reported by earlier workers

(Khurana 1969). The blood smear revealed few babesia species organism which could be because of chronic babesiosis. The hindquarter paralysis as occurred in this case might be due to damage to central nervous system which is a feature of infection with *B.bovis* and some strain of *B.Canis*. The parasitized cells selectively concentrate in brain capillaries and obstruct blood flow (Kreier, 1977).

Biochemical investigation revealed increase in blood urea, SGOT, SGPT and CPK, which could be due to kidney and liver dysfunction followed by muscular degeneration probably due to persistent recumbancy and to toxemia. Despite of specific treatment the animal was died on 24.1.02.

Postmortem examination: Microscopic changes in lung showed blackish pigmentation over parenchyma and emphysematous. Pericardium-congested. Heart-Left ventricle full with clotted blood. Stomach-empty with necrotic foci. Kidney - Cortex enlarged, congested.

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