



RESEARCH ARTICLE
PREDOMINANCE OF BABESIOSIS INFECTION AT THE ONSET MANSOON

Murali Jadesh. V

Department of Zoology, Gulbarga University, Gulbarga Karnataka

INTRODUCTION

Eighteen species of babesia have been recognized the parasites multiply inside erythrocytes by asexual division; characterically are pear shaped and lie at an angle with narrow ends in opposition.

Multiplication of the organism occurs inside the erythrocytes invades by scizogony and on being liberated from the erythrocytes invades other cells. This goes on until large percentages of red blood cells get parasitized (Souls by, 1973). The present study reaffirms the predominance of the babesiosis at the onset of monsoon season.

METHODOLOGY

During July 1 to July 31, peripheral blood smears were collected from various species of animals. Which were brought to the O.P.D of N.M.C. Veterinary Dispensary, Mahal, and NAGHPUR? 22 smears from suspected animals were sent for investigation to the Department of Parasitological, Nagpur veterinary College, and Nagpur. Anaemic visible mucous membrane (Vmm) and increased body temperature were marked symptoms in canines.

Some times Vmm were blackish with subnormal body temperature. Also, increased heart rate and higher respiratory rate were noticeable. In caprines, the temperature was not too high but nervous disorder; anaemic visible mucous membranes were the common symptoms along with poor health and rough body coat. Respiratory distress, cough and diarrhea were other Symptoms.

In equines, thin lean health, normal body temperatures, congested ocular visible mucous membrane with yellowish tinge were the common symptoms in only a horse but in some others high body temperature, ocular discharge, anorexia were noticeable. In felines, high body temperature, anorexia, anaemic visible mucous membrane were common symptoms.

RESULTS AND DISCUSSION

Various species of genus Babesia were identified in the smears of different species of animals as per the Souls by (1973). with the use of Leishman's stain Babesia equi, B. bigemina, B. felis, B. ovis and B.canis were identified in Equines, Bovines, Felines, Caprines and Canines respectively of the 22 smears, 8 from canines, 3 from equines,6 from caprines and 1 from felins were found positive for babesiosis. Animals exhibited good recordable results with the single intramuscular injection of the compound Diminazin Aceturate(Diamez, Merind)In large animals to get the dose rate was 3.5 mg per kg body weight but in small animals to get the optimum results the introduced dose was 4.44 mg per kg body weight along with 10% dextrose. Liver tonic such as Liverget (Cadila), haematanics and antibiotics of tetracycline group were useful. In thin lean health horse the total serum bilirubin was up to 2.2 mg/dl against the normal 1.3 mg/dl prior to the treatment. The animals with nervous disorder failed to recover and died kolte *et al* (2002) reported similar observation in dog suffering from cerebral babesiosis.

Transmission of babesiosis is related to their multiplication in ticks. Multiplication of ticks on the other hand is dependent on temperature and is rapid at 28 oC However, besides temperature, other factors such as rainfall and relative humidity are important in optimal multiplication of ticks and spread of babesiosis.All these Environmental factors are prevalent in the monsoon season.

References

- Kolte SW, Maske DK, Kukure NV and Jain H (2002); cerebral babesiosis ina dog
- A case report. Indian Veterinary Journal 79,273-274
- Soulsby E.J.L (1973): Helminthes, Arthropods and Protozoa of Domesticated Animals. The E.L.B.S Publication, London.
