

## AN ACCOUNT OF THEILERIOSIS AMONG CALVES\*

R. ANANDAN, M. GANESAMOORTHY LALITHA JOHN,  
E. KANDAVEL\*\* and C. M. LALITHA

Department of Parasitology  
Madras Veterinary College, Madras-600 007.

Theileriosis among calves in India was reported earlier by Ravachari (1944), Sharma and Kalra (1951), Gautam *et al.* (1970), Sharma and Gautam (1971, 1973), Sharma (1980) and Shastri *et al.* (1982). Paucity of information on theileriosis among calves in this part of the country prompted us to give an account of our observations on the same.

### MATERIALS AND METHODS

Cattle which attended the Madras Veterinary College large animal clinics with symptoms of fever, enlargement of superficial lymph glands and tick infestation between April and December 1982 were examined. Auricular blood smears, needle biopsy smears from superficial lymph glands and ticks on the body were collected for microscopical examination. Clinical materials received from the field staff during this period were also examined.

### OBSERVATIONS AND DISCUSSION

Clinical materials from a total of 28 ailing calves (exotic 5, cross bred 14 and indigenous 9) were examined during these nine months and 6 (cross bred 4 and indigenous 2) were found positive for *heileria annulata* infection. Number of suspected adult cattle examined during this period and confirmed were 196 and 13 respectively.

Calves suffering from theileriosis were weak, dull and anaemic with temperature rise upto 41°C or even more at times. Enlargement of the superficial lymph glands, commonly the prescapular lymph glands was noticed. Serous nasal discharge, lachrimation and paler conjunctiva were observed. Loss of appetite was a frequent complaint with diarrhoea in some. Oedema of the jowl was present in one calf. Clinical symptoms observed in affected calves were in conformity with those described by earlier workers, except oedema of jowl. Haemoglobinuria reported among ailing calves by Gautam *et al.* (1970) and Sharma and Gautam (1971, 1973) was not observed in calves at Madras but was reported in adult animals by the field staff.

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\*\* Department of Clinics, Madras Veterinary College.

More than half the number of cases examined at the college clinic were less than three months of age. Youngest among them was 9 days old and revealed Koch's blue bodies in gland smears and erythrocytic forms in the auricular blood smears. Theileriosis was reported in calves aged 2-4 days (Sharma and Gautam, 1977), 7 days (Sharma, 1980), 10 days (Sharma and Kalra, 1951), and 16-25 days (Gautam *et al.*, 1970; Sharma and Gautam, 1971, 1973). The incubation period of theileriosis was reported to be 9 to 25 days (Soulsby, 1968). Occurrence of the disease in 9 days old calf here and in 2-4, 7 and 10 days old elsewhere, suggests a shorter incubation period or possible congenital infection as also opined by Sharma and Kalra (1951) and Sharma and Gautam (1977). Ticks collected from ailing cattle were identified as *Boophilus microplus* and *Hyalomma hyalomina hussaini*.

#### SUMMARY

Occurrence of theileriosis among calves at Madras has been reported. Pyrexia, lymphadenopathy, serous nasal discharge, lachrimation, anaemia and inappetance were the commonest symptoms observed. Calves below three months of age were found suffering from this disease more commonly. Youngest among the affected calves was 9 days old. *Boophilus microplus* and *Hyalomma hyalomina hussaini* ticks were recovered from affected calves.

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