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DONKEY PIROPLAMOSIS CAUSED BY *BABESIA CABALLI*: A CASE REPORT

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ABSTRACT

A 7 year old jennet weighing 120kg was presented to the Animal Health Unit of a livestock farm with the chief complaint of abortion. The case was diagnosed as Piroplasmosis caused by *Babesia caballi*. The condition was promptly treated with diaminazine aceturate at the dose rate of 50mg/kg. There was no relapse in this case as Piroplasmosis in donkeys can be effectively treated with good prognosis.

Key words: Jennet, Piroplsmosis and *Babesia caballi.*

INTRODUCTION

Equine Piroplasmosis, also known as equine babesiosis is a tick-borne intra erythrocytic protozoal infection of donkeys, mules, horses and zebra that is caused by *Theileria equi* and *Babesia caballi* (Wise *et al.*, 2013). The disease is transmitted primarily by *Ixodid species* of ticks and particularly by *Hyalomma dromedarii* and *Rhipicephalus sanguineus* (Laus *et al.*, 2015). The disease has been reported worldwide especially from tropical and sub-tropical regions of the world where tick vectors are present including the Middle East but to a lesser extent, it may occur in temperate regions (García *et al.*, 2013).

Case history and clinical examination

A 7 year old jennet weighing 120kg was presented to the Animal Health Unit of a livestock farm with the chief complaint of abortion. On Physical examination, there was no tick found on the body of the Donkey. Blood sample was subjected to thin blood smear which was prepared by placing a pin -head drop of blood near one end of a clean glass slide. A second glass slide held at an angle of 30^0 was used to touch and spread the dropped blood horizontally and firmly over the length of the smear slide with an even, smooth and gentle dragging motion to form the film with a feathered edge. The blood film was allowed to dry thoroughly. This was then fixed in methyl alcohol for three (3) minute and allowed to dry again after which it as transferred to a staining jar (Filled with 1:10 dilution of Giemsa stain i.e 10mls stock Giemsa stain plus 90mls of buffer solution pH 7. 0) and stained for 25- 30 minutes. The stain was then poured off and the slide rinsed several times in running water and rinsed once with buffer distilled water pH 7.0 and allowed to air dried vertically in a wooden slide block. The prepared slide was then examined for presence of blood parasites under an oil immersion objective (× 100) of the light microscope (Charles, 2002). The blood sample was found to be positive for *Babesia caballi* (+++) and the case was diagnosed as equine babesiosis (Equine Piroplasmosis).

Treatment

The case was treated with diaminazine aceturate (2.3g granules dissolved in 12.5mls of sterile water) intramuscularly at the dose rate of 50mg/kg body weight. The Jennet recovered with no signs of relapse.

DISCUSSION

The economic loss due to Equine Piroplasmosis is of great challenge to donkey production worldwide, especially in regions where tick vectors are abundant. The sources of infection include infected animals that may remain carriers for long periods as well as transmission by vectors (Veronesi *et al.,* 2014). The disease, besides causing mortality (about 17.5%), is also associated with high economic losses regarding treatment costs, loss of performance, abortion and death (Piantedosi *et al*., 2014). The disease has a principal significant impact on the international movement of donkeys and horses (Piantedosi *et al*., 2014).

CONCLUSION

Equine Piroplasmosis is a major global challenge to donkey production causing great economic loss to farmers due to cost of treatment, abortion and mortality..

RECOMMENDATION

There is need to urgently address the problem of Equine Piroplasmosis by the governments and people through effective tick control measures at all year round.

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