MIXED INFECTION IN A DONKEY: A CASE REPORT

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ABSTRACT

A five-month-old male donkey was presented to the large animal clinic, out patient medical unit, Madras Veterinary College Teaching Hospital with history of not drinking milk for past two days and symptoms of dull, dehydrated and watery diarrhoea with foul smelling. *Strongyle* spp eggs were detected on faecal examination and the bacteriological culture of the sample revealed *Salmonella* spp and the diagnosis was confirmed as mixed infection. Antibiotic sensitivity test, indicated that Salmonella isolates were sensitive to Ceftriaxone and tetracycline. This type of rare mixed infection with strongylosis and salmonellosis was successfully treated with antibiotics, dewormer and fluids.

KEY WORDS: Donkey, *Strongyle, Salmonella*, Mixed infection and Diagnosis

INTRODUCTION

Donkeys are stoical, hardy and able to survive with little attention (Pradhan, *et al.,* 1991 and Ramachandran and Srinivas 1991). Some times combination of parasitic and bacterial infection may occur. *Strongyles,* common intestinal nematode, cause diarrhoea; if accompanied with other bacterial infections, animal become in critical condition. The common health problems are usually simple to treat, but infections caused by mixed organisms constitute a severe impediment to successful management of donkey due to debility and death of animals (Rodriguez-Maldonado 1991). The present paper reports mixed infection and successful treatment of the case.

CASE HISTORY AND CLINICAL OBSERVATIONS

A five-month-old male donkey was presented to the large animal clinic, out patient medical unit, Madras Veterinary College Teaching Hospital with history of not drinking milk for past two days. Clinical examination of the donkey revealed all physiological parameters (heart rate, respiration rate and rectal temperature) within the normal range. However the clinical signs manifested by the donkey were dullness, dehydration and foul smelling with watery diarrhoea

DIAGNOSIS AND TREATMENT

Faecal sample examination carried out as per the standard protocol of Soulsby *et al.* (1982), revealed *Strongyle* spp eggs. The animal was dewormed with Tab. Fenbendazole 5 mg/kg B.Wt, PO, Single Dose. However, the animal not recover from diarrhoea even after specific anthelmentic treatment. Hence the faecal sample was subjected to bacteriological culture (Quinn *et al*., 1994) and it was positive for *Salmonella* spp. This confirmed the diagnosis as mixed infection. The *Salmonella* isolates were subjected to antibiogram as per standard protocol (Quinn *et al*., 1994), with Sulphadimidine, Tetracycline, Penicillin, Ceftriaxone, Neomycin and Chloram-phenical. Cent per cent sensitivity was observed for Ceftriaxone and Tetracycline, followed by Sulphadimidine, Chloramphenicol and Neomycin. *Salmonella* showed resistance to Penicillin.

The donkey was administered Inj. Sulphadimidine 100-200 mg/kg B.Wt. Inj. Ringers Lactate 150 ml i/v, Inj. Dextrose Normal Saline (5% Dextrose and 0.9% Normal Saline) 100 ml i/v, for three days.

RESULTS AND DISCUSSION

The donkey showed remarkable recovery after this treatment schedule. The animal exhibited normal appetite and the faeces became negative for *Strongyle* spp egg and *Salmonella*. In donkeys, mixed infestations due to nematodes and cestodes have been reported commonly (Soulsby, 1982). But infections with both *Strongyle* and *Salmonella* were rare in donkeys. Emergence of resistance to antimicrobial drugs in *Salmonella* is a worldwide problem (Van-Duijkeran *et al.,* 2002). In this case Ceftriaxone and tetracycline had shown 100 per cent efficacy as reported by Mammina *et al.* (2002)

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