

Clinical Management of Impaction and Verminous Colic in a Donkey

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Abstract

A female donkey was diagnosed for impaction and verminous colic on basis of compatible history, clinical signs, per-rectal examination and coprological examination. The donkey was successfully managed with fluid therapy, analgesic, purgative, ivermectin and antibiotic.

Keywords: Colic; donkey; impaction

Introduction

Colic (abdominal pain) is a clinical condition of serious concern affecting welfare and survival of donkeys worldwide. Impaction colic is the most common type of colic diagnosed in donkeys and the fatality rate is high (Cox *et al.*, 2007). Several risk factors have been identified in donkeys for impaction colic including increasing age, sudden change in diet, previous episodes of colic, weight loss, dental disease and seasonal effect (Cox *et al.*, 2009). Risk factors and epidemiology of impactive colic is well documented in literature, but there is paucity of information regarding its successful clinical management in India. So, keeping in view this fact, this clinical article presents successful therapeutic management of small colon impaction associated with verminous colic in a female donkey.

History and Observation

A female donkey (7 years old) was presented with primary complaint of not passing feces, colic and anorexia for past 4 days. Earlier attempts of treatment were unsuccessful. Animal was in neglected condition and was being used for transportation of building materials. Further investigations with owner revealed that animal had a history of consuming non-edible items and was never dewormed. Animal was in pain manifested by restlessness as evident by repeated lying down and getting up (Fig.1). Clinical

examination revealed normal rectal body temperature (100.4°F), congested conjunctival mucus membrane, normal respiration rate and increased heart rate (65 per minute). Oral cavity examination did not reveal any dental problem. Auscultation of abdomen showed decreased frequency and intensity of gut sounds (borborygmi). Per rectal examination revealed constipated feces containing ropes and polythene remnants in rectum and constipated feces in small colon. Hematological examination revealed neutrophilic leucocytosis and coprological examination was found positive for eggs of *Strongyle* species. On the basis of compatible history, clinical signs and laboratory findings; the case was diagnosed as small colon impaction associated with verminous colic.

Treatment and Discussion

The female donkey was treated with fluid therapy (Inj. Normal saline @ 10 litre I/V per day for 5 days), purgative (liquid paraffin @ 750 ml by nasogastric route for 2 days), analgesics (Inj. Ketoprofen @ 2.2mg/kg body weight I/V, Xylazine @ 0.5mg/kg b.wt I/V, Butorphanol @ 0.02 mg/kg b.wt. and Flunixin Meglumine 1.1mg/kg b.wt. I/V as per need), antibiotic (Trimethoprim @ 20mg/kg b. wt., bid, I/M for 5 days) and anthelmintic (Ivermectin @ 0.2 mg/kg b.wt. P.O. once). On sixth day, animal passed the black diarrhetic feces containing polythene and rope remnant and showed significant improvement in other clinical signs (Fig.2). In present case, poor dietary habits, ingestion of foreign bodies and negative

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deworming status might be the cause of impaction and colic. Strongyle infestation due to poor worm control is the common cause of colic in donkeys in tropical countries. Leucocytosis might have resulted from chronic irritation of intestinal wall



Fig. 1: Depressed female donkey with impaction and colic (bruise marks on face)



Fig. 2: Black diarrheic feces passed after treatment due to impacted foreign materials, leaving the wall exposed to secondary infection, which resulted in inflammation. Plummer (2009) also documented abdominal pain (manifested by flank watching, pawing, frequently lying down and rolling on ground) increased heart rate, decreased manure production and lack of borborygmi as most common clinical signs in small colon impaction in horses. A definitive diagnosis of small

colon impaction is usually made by rectal palpation (Rhoads *et al.*, 2009). The reported prognosis for small colon impactions ranges from fair to good with medical treatment. Medical therapy includes the use of balanced polyionic intravenous fluids as well as paraffin oil given by way of a nasogastric tube and analgesics. Flunixin meglumine and sedatives are used to manage severe abdominal pain (Chand *et al.*, 2011). Strongyle infestation is well managed by Ivermectin @ 0.2mg/kg b.wt. orally once.

Summary

A case of small colon impaction associated with verminous colic in a female donkey was diagnosed on the basis of history, clinico-haematological examination, per rectal examination findings and was successfully treated with fluid therapy, analgesic, purgative, ivermectin and antibiotic.

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