CASE REPORT
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# MANAGEMENT OF A CASE OF ACUTE EQUINE COLIC IN WAYANAD DISTRICT, KERALA

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## ABSTRACT

The current clinical case was reported from Wayanad district of Kerala. The animal was a nine-year-old female chestnut pony weighing about 90 kg. Clinical signs observed were recumbency, anorexia, dehydration, rolling, kicking at the abdomen, tachycardia, abdominal distension, tympanic sounds on abdominal percussion, and frequent attempts to urinate and defecate. Treatment by using Flunixin meglumine at a dose rate of 1.1 mg/kg bodyweight Ringer's lactate, dextrose normal saline intravenously, ranitidine intramuscularly at a dose rate of 2 mg/kg bodyweight along with nasogastric intubation and coconut oil infusions successfully controlled the signs of colic and the animal recovered uneventfully.

**Keywords:** Colic, Equine, Nasogastric intubation, Flunixin meglumine, Tachycardia

## INTRODUCTION

As the name suggests colic is nothing but abdominal pain. In equines, severe colic may lead to life-threatening circumstances. Alimentary tract dysfunction which results in accumulation of gas in gastrointestinal tract is one of the major causes of equine colic. Other reasons include distension of gastrointestinal tract caused by indigestion, lack of periodic exercise, sudden feed change (Snyder *et al.* 1988), simple obstruction, complete obstruction, enteritis caused by *Salmonella, Clostridia* (Ferraro, 2008), rickettsia, and equine viral arthritis, parasites such as *Parascaris equorum* (Sellon, 2010) and *Strongylus vulgaris* (White, 2014) or due to chemical poisons. Severe distension of gastrointestinal tract due to bloat can lead to rupture of stomach or intestine and death in horses. Other factors included spoiled feed (Wheat, 1975), young protein-rich grass

(Huskamp and Kopf, 1983), coarse, poor quality roughage (Embertson *et al*.,1985) and pelleted feeds (Morris *et al.,* 1989), overfeeding (Wheat, 1975), underfeeding (Rollins and Clement, 1979), feeding on the ground (Wheat, 1975), weather changes (Rollins and Clement, 1979), poor dentition (Meagher,1972), recent pregnancy (Snyder *et al.,* 1988) and horses with the history of previous colic (Ducharme *et al.,* 1983).

## CASE HISTORY AND OBSERVATION

The present case of equine colic was reported from Wayanad district of Kerala state. The animal was a nine-year-old female chestnut pony weighing about 90 kg and in second parity. The owner's primary complaint was deprived appetite for 12 hours, recumbency and rolling, 2 hours before the presentation. Detailed history revealed inadequate exercise and feeding of rice gruel 12 hours back. Recumbency, anorexia, dehydration, flank watching, pawing, rolling, kicking at the abdomen, tachycardia (72 beats per minute), abdominal distension, tympanic sounds on abdominal percussion, and frequent attempts to urinate and defecate were the observed clinical signs. From the history and clinical signs, the case was diagnosed as acute colic due to gastric distension following oral feeding of rice gruel and lack of adequate exercise.

**Fig. 1.** Recumbent animal

## TREATMENT AND DISCUSSION

Treatment was started using Flunixin Meglumine (85.02 mg /ml, equivalent to 50 mg of flunixin base) at a dose rate of 1.1mg/kg bodyweight IV for analgesia followed by fluid therapy with Ringer lactate- 5 litres and Dextrose Normal Saline - 5 litres IV. Ranitidine at a dose rate of 2mg/kg bodyweight was given intramuscularly as antacids. To relieve bloat nasogastric intubation was done and 500 ml of coconut oil was infused to the abdomen. Sudden release of gas was observed and the animal showed marked relief of abdominal pain. Amoxirium® Forte 4500mg (Amoxicillin 3000mg and Sulbactum 1500 mg) at a rate of 10 mg per kg body weight was given IV to prevent secondary infections. Follow up treatment was done for five days with Amoxirium® Forte 4500mg, Ranitidine, and Flunixin meglumine. There was no recurrence of clinical signs so the treatment was terminated thereafter.

Response to Flunixin meglumine was similar to findings of Gitari *et al.* (2017) that was because of Flunixin meglumine has been cited as the most appropriate inhibitor of visceral pain. It has several advantages such as capability to provide analgesia for eight to twelve hours, control of inflammation and endotoxemia, thus resolving most of the simple medical types of colic. Radostits *et al.* (2007), mentioned that colic affected equines may exhibit marked dehydration which was evident in the present study. Enterotoxigenic shock was the major cause of dehydration. Sykes and Jokisalo (2015), suggested the usage of ranitidine to prevent gastric ulceration associated with colic. In this case, Ranitidine was very helpful to control the associated gastritis. Gitari *et al.* (2017), explained role of nasogastric intubation during equine colic. In the present case nasogastric intubation was helpful to relieve severe bloat which played a crucial role in the emergency care.

## SUMMARY

Colic is a life-threatening condition in equines. Alimentary tract dysfunction is the major cause of equine colic. The current clinical case was reported from Wayanad district of Kerala. The nine-year-old chestnut pony showed clinical signs such as recumbency, anorexia, dehydration, rolling, kicking at abdomen, tachycardia, abdominal distension, tympanic sounds on abdominal percussion, and frequent attempts to urinate and defecate. Nasogastric intubation and coconut oil infusion were helpful in relieving the bloat. Intravenous injections of Flunixin meglumine, Ringer's lactate, dextrose normal saline and intramuscular injection of Ranitidine were administered to alleviate clinical signs. Treatment was followed up to five consecutive days using the antibiotic, Amoxirium® Forte 4500mg, Ranitidine, and Flunixin Meglumine. The animal showed an uneventful recovery.

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