case, the exact reason of fissure couldn’t be ruled out although it might be due to hereditary cause. Catlin mark seen in present case might have associated with improper development of fetal central nervous system thereby resulted prolonged gestation and dystocia (Roberts, loc. cit.).

References

Management of Colic Due to Enterolith in a Mare

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(Received : 09-03-2015; Accepted : 22-06-2015)

Abstract
A 6 year old mare had recurrent abdominal pain, not passing faeces and distended abdomen. All parameters were within normal range except absence of gut motility and empty rectum on palpation. Initially, it was diagnosed as impacted colic and treated conservatively. The animal had not passed faeces, but slight GI motility was revealed. A hard mass was palpated and removed per-rectally. Then, animal passed faeces and there was reduction in distended abdomen. Radiography of a round hard mass of 300 gm and 22.8 cm in diameters showed central nidus and concentric layers around it which indicated an enterolith.

**Key words:** Enterolith, Mare, Colic

Colic due to enterolith is rarely reported in equine in India but is common in California (Hassel, 2002 and Singh *et al.*, 2010). The present study reports about successful conservative treatment of colic due to enterolith in a mare.

Case History and Observations
A 6 year old non-descript mare had not passed faeces for two days and had clinical signs of recurrent abdominal pain. Mare was anxious and had low grade abdominal pain with distended abdomen. Clinical examination revealed pulse 44/min, respiration 22/min, rectal temperature 100.2°F, and pale pink mucous membranes. Gut motility was absent during abdominal auscultation; rectal palpation revealed an empty rectum; and gastric reflex was absent. On the basis of history and clinical examination an impacted colic was diagnosed.

Treatment and Discussion
Mare was treated with intravenous flunixin meglumine (1.1 mg/kg SID for two days), ringer lactate 8 litre, sulphadiazene and trimethoprim (20 mg/kg; SID for two days, followed by four days PO) and 1 litre liquid paraffin through nasogastric tube. On second day, animal had not responded to the treatment but there was slight improvement in GI motility. On rectal palpation a hard mass was felt at the distal end of the small colon which could not initially be removed.
Liquid paraffin was infused per-rectum to lubricate and soften the hard mass, a finger was inserted into the mass and caudal pressure was exerted on it. A round hard mass weighing 300 g and having 22.8 cm diameter and 7.6 cm length was evacuated per-rectally. After half an hour, the mare had passed faeces and there was appreciable reduction of distended abdomen. The owner was advised to feed a laxative diet and no further signs were reported.

The case was tentatively diagnosed as impacted colic and same was confirmed on removal of enterolith per-rectum. Rectal palpations are generally inconclusive; however in small number of horses enteroliths may be detectable on palpation per rectum (Blue, 1979). Definitive diagnosis for enterolithiasis can be determined with abdominal radiography, exploratory celiotomy, necropsy or via palpation per rectum (Pierce, 2009). The radiography of the hard mass following removal shown a small radio dense nidus centrally and concentric layers around it indicating an enterolith (Blue, loc.cit). The largest reported enterolith had a diameter of 15 cm, while in the present study the diameter was 22.8 cm; however the weight of this enterolith was similar to previous reports (Blue, loc.cit). The recovered mass was spherical in shape which suggested single concretion whereas tetrahedral shape indicates more than one concretion (Blue, loc.cit).

The present case reported in mare, the reason is unknown, but fluctuation in concentration of prostaglandin in serum associated with the reproductive cycle may affect GI motility (Mair et al., 2002) which in turn promotes enterolithiasis. However, neither sex nor age has been found to be significantly associated with enterolithiasis (Cohen et al., 2000).

An enterolith was found in 6 years mare in agreement with previous reports however, an enterolith was recorded in 16 months colt also (Singh et al., loc. cit). Arabian, Arabian crosses, Morgans, American Saddlebreds and donkeys were overrepresented (Hassel loc. cit), however, enterolith in a non-descript mare was described in the present report. The exact reason for the formation of enteroliths has not been established, but environment factors, breed, intestinal pH and the presence of a nidus are potential elements for enterolithiasis (Hassel loc.cit and Cohen et al., loc. cit). The present mare had stall confinement and no access to pasture which could be one of the factors for enterolith (Cohen et al., loc. cit).

Summary
The successful per-rectal removal of an enterolith in 6 years old non-descript mare is reported.

References