

## COLONIC FAECOLITH AND ITS SURGICAL MANAGEMENT IN A SHE BUFFALO

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**ABSTRACT**

This communication reports a case of surgical management of colonic faecolith in a she buffalo.

**Keywords:** Mehsana buffalo, *Bubalus bubalis*, faecolith, colon

**INTRODUCTION**

Intestinal obstruction in ruminants is a sporadic and relatively infrequent condition. However, it is more common in cattle and sheep when compared with buffaloes and usually occurs in the jejunum and ileum and rarely in the colon (Singh *et al.*, 2003). Faecoliths instigated intestinal obstructions are usually encountered in bovines, wherein the undigested food material obstructs the tract and creates difficulties while completing the mechanism of digestion. The present report describes a successful surgical management of a rarely occurring colonic faecolith in a Mehsana she buffalo.

**CASE HISTORY AND CLINICAL OBSERVATION**

A three-year-old Mehsana she buffalo was presented with the history of anorexia and cessation of defecation for one week. Further, the animal was treated thrice by field veterinarians without any improvement in the condition. Clinically, the animal was dull, depressed, dehydrated and showed nasal discharge along with bilateral abdominal distention. Per-rectal examination revealed only mucous flakes and gas filled distended intestinal loops. A hard circular mass could be palpated at pelvic brim, and this was confirmed to be the intestinal obstruction after ultrasonographic examination (Figure 1).

**SURGICAL INTERVENTION**

The buffalo was restrained in the trevis and the right para-lumber fossa was prepared for aseptic surgery in standing position. The abdominal cavity was opened through a 15cm long incision under local infiltration with 2% lignocaine hydrochloride. On exploration, a hard colonic mass was palpated and with great difficulties it was brought to the operative site. Entrotomy (Figure 2) was performed to remove the mass (faecolith) following principles of intestinal surgery. The entrotomy wound was

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closed by single layer of cushing sutures using chromic catgut #1/0 with swagged on needle. The abdominal wound was closed in routine manner. It was interesting to note that the animal passed large quantity of the faeces even before completion of the skin sutures (Figure 3). Post-operatively, inj. 0.9 % NSS and inj. 5% DNS IV 2000 ml each along with antibiotic<sup>1</sup>, analgesic<sup>2</sup> and antihistaminic<sup>3</sup> were administered for five days in prescribed doses. Daily wound dressing using povidine iodine led to uneventful recovery and skin sutures were removed on the 12<sup>th</sup> postoperative day.

## DISCUSSION

Any mechanical or functional interference with the progression of the intestinal contents cause obstruction (Singh *et al.*, 2003). Although volvulus, intussusception, adhesions or herniation are the common causes of intestinal obstruction; the faecoliths and foreign bodies have also been found responsible for this condition (Hofmeyer, 1982 and Kamble *et al.*, 2008). Faecoliths are predominately observed during summer months due to minimum availability of drinking water and simultaneous dry fodder feeding. However, the buffalo in the present study was admitted to the hospital in the month of January. Earlier, the diagnosis of intestinal obstruction was mostly based on the history, clinical signs and clinicopathologic examinations but imaging tools like ultrasonography with its

1 Trimethoprim and Sulphamethoxazole: Inj. Oriprim-V-Vet, Zydus Animal Health Ltd, Ahmedabad.

2 Meloxicam: Inj. Melonex, Intas pharmaceuticals Ltd., Ahmedabad.

3 Pheneramine maleate: Inj. Avil, Intervet Pvt Ltd, Wagholi

limited use in large animal abdominal imaging has also been reported (Braun, 2003) and served excellently in the present study. Successful surgical management of faecolith cases in cattle has been reported by Abutarbush *et al.* (1983) and Kamble *et al.* (2010). In the present case too; the recovery was uneventful but the vital part was the single layer intestinal suturing which would have been beneficiary over the diaphragm formation which in turn prevents the narrowing of the intestinal lumen.

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Figure 1. Ultrasonographic image of colonic faecolith.



Figure 2. Faecolith *in situ*.



Figure 3. Faeces passed even before closure of laparotomy wound.