AN UNUSUAL CASE OF OESOPHAGEAL OBSTRUCTION IN A FEMALE BUFFALO

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ABSTRACT

This paper reports a rare case of oesophageal obstruction anterior to hiatus oesophaghi along with ruminal tympany in a female graded Murrah buffalo caused by a palm kernel and its successful surgical treatment through rumenotomy.

Keywords: female buffaloes, Murrah, oesophageal

INTRODUCTION

Obstruction of the oesophagus is a rare occurrence in ruminants. Apart from cattle, oesophageal obstruction has been occasionally reported in buffaloes (Tyagi and Jit Singh, 1999). This paper reports a rare case of oesophageal obstruction at cardia, caused by a regurgitated palm kernel.

HISTORY AND CLINICAL SIGNS

A nine-year-old female graded Murrah buffalo weighing about 420 kg was presented to the clinic with a history of not taking feed and water and sudden development of bloat since the morning. It had calved three months before and had been sent out for grazing daily. The bloat was relieved using 16 G needle at a local hospital but the condition recurred. Clinical examination revealed distended left flank. Pulse, temperature and respiration were within normal physiological limits. On passage of a stomach tube, an obstruction was felt at the thoracic region anterior to the diaphragm. It was tentatively diagnosed as oesophageal obstruction, and it was decided to relieve the obstruction through rumenotomy, as thoracotomy in ruminants requires special equipment, and the procedure is a difficult one.

RESULTS AND DISCUSSION

Rumenotomy was performed following standard surgical procedure under inverted L-block using 2% Lignocaine hydrochloride. On opening the rumen, surprisingly, it was full of palm kernels. The obstructing palm kernel anterior to diaphragm was taken out by hand with force after clearing the entangled fibrous food material and all the remaining palm kernels found in rumen were also removed. Probiotics were placed in the rumen before closing it. The laparotomy wound was closed

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The animal was given streptopenicillin 5.0 g i/m for seven days, meloxicam 20 ml i/m for three days and DNS 2 L i/v for three days as postoperative care. The cutaneous sutures were removed on 10th postoperative day.

The intraluminal oesophageal obstruction, commonly known as choke, may occur in buffaloes due to vegetables, fruits and phytobezoars (Tyagi and Jit Singh, 1999) or to pieces of leather or rubber (Salunke et al., 2003). In ruminants, obstruction occurs mostly in the cervical region, and obstruction in the thoracic oesophagus is rare. In buffaloes, obstruction of the oesophagus has mostly been recorded in the distal cervical region as the lumen of the oesophagus narrows down at the junction of middle and distal third (Tyagi and Jit Singh, 1999). Madhava Rao et al. (2009) reported a case of cervical oesophageal obstruction due to coconut, and thoracic oesophageal obstruction has been reported by few workers (Ojha and Mohanty, 1970; Yadav et al., 2008). Shivprakash (2003) found a higher incidence in pregnant buffaloes and young calves and attributed the same to nutritional deficiencies, pica and difficulty in adaptation during transition from milk to fodder, respectively. The prognosis of oesophageal obstruction is not always favourable as the oesophageal surgery is associated with various complications such as suture dehiscence, perforation or fistula, and stenosis due to scar.

In the present case, 92 palm kernels were recovered from the rumen (Figure 1). It may be due to the greediness of the animal during early rainy season, during which time ripened palm kernels are abundant in the fields and swallowed by animals sent out for grazing. The probable reason for the unusual site of the obstruction was that when the animal is ruminating one of the palm kernel has migrated and occluded at the hiatus oesophagi of oesophagus anterior to diaphragm, and this resulted in its present condition. Attempts to push the object with a probang were not successful, perhaps due to a change in position of kernel at the site, along with entangled food material which was removed.

Figure 1. Photographs showing the palm kernels recovered from the rumen.


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first with fingers before retrieving the palm kernel from the oesophagus. The animal made uneventful recovery, and no complications were reported up to 6 months post surgery.

**REFERENCES**
