

CASE REPORT

Surgical Management of Choke Due to Trichobezoar in a Buffalo

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Foreign body syndrome in bovines is a matter of concern in different veterinary practices all over the world. Oesophageal obstruction can be intra-luminal or extra-luminal. Intra-luminal oesophageal obstruction may occur due to vegetables, phytobezoars (Krishnamurthy *et al.*, 1997; Tyagi and Singh, 1999), trichobezoar (Patel and Brace, 1995), tricho-phytobezoar (Gangwar *et al.*, 2013), pieces of leather or rubber (Salunke *et al.*, 2003), coconut (Madhava Rao *et al.*, 2009) or palm kernels (Hari Krishna *et al.*, 2011), Fatality and risk associated with complete oesophageal obstruction in ruminants results from the inability of fermentative gases to escape the rumeno-reticulum opening (Borakhatariya and Gadara, 2017). The primary indication for oesophageal surgery in large animals is to relieve esophageal obstructions (choke) which have not responded to conservative treatment (Meagher and Mayhew, 1978). In this paper a case of oesophageal obstruction due to phytobezoar in a buffalo and its surgical management has been discussed.

CASE HISTORY AND CLINICAL OBSERVATION

A five-year-old buffalo was presented at State Veterinary Hospital, Bhopal with a history of anorexia, dysphagia and salivation, and swelling at the mid-cervical region for 4 days. Clinical parameters were within the normal limits. Physical examination revealed an immovable hard mass at the middle of the cervical oesophagus. There was an absence of rumination with partial bloat and dehydration with shrunken eyes and pain during palpation over the swelling. Based on the examinations and history, the case was diagnosed as cervical oesophageal obstruction or choke. Manual efforts to dislodge the obstruction was failed and hence surgical intervention oesophagotomy was planned.

TREATMENT AND DISCUSSIONS

Animal was given fluid therapy ie. 3 liter 5% DNS and Ringers lactate 2-liter i/v. The animal was secured in right lateral recumbency, and the area surrounding the hard mass was prepared for aseptic surgery. Sedation was achieved by xylazine hydrochloride @ 0.01 mg/kg body weight i/m and local analgesia was achieved by the local infiltration of 2% Lignocaine hydrochloride cranio-dorsal to the proposed

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site of the incision. A 7-8 cm long skin incision was given over the obstruction to expose the muscle layer over the oesophagus. Muscles were separated and the oesophagus was exteriorized and secured well. About 6 cm longitudinal incision was made proximal to the mass at the dorsal aspect of the oesophagus and the trichobezoar ball was removed gently by squeezing towards the incision site (Fig. 1). An



Fig. 1: phytobazor retrieved upon surgery.

oesophageal incision was repaired by suturing the mucous membrane by continuous Connell suturing pattern by using catgut no. 1 with knot inside the lumen. Other layers were sutured in a routine manner.

Post-operatively, the animal was administered antibiotic Inj. Wouter-S (ceftriaxone and sulbactam) 4.5 gm and 15 ml of Inj. Melonex (meloxicam) i/m for 5 and 3 days, respectively, and was maintained on the intravenous fluid therapy (Ringer's lactate and 5% DNS) for 3 days. A soft semisolid diet was gradually started from 4th post-operative day. Antiseptic dressing of the suture site was done with povidone iodine solution. For two more days meager salivation was noticed. Sutures were removed on 12th post-operative day, and the animal recovered uneventfully.

Sreenu and Sureshkumar (2001) reported successful surgical management of oesophageal obstruction by tarpaulin cloth in a buffalo calf. Vishwanatha *et al.* (2012) successfully performed the oesophagotomy and manage the cervical choke caused by a mango kernel in a cow. Gangwar *et al.* (2013) successfully relieved the choke due to smooth and round tricho-phytobezoar by oesophagotomy in a crossbred cow in standing position. In the present case, trichobezoar was rough and composed of hairs, wires, polythene pieces etc. Therefore surgical intervention as early as possible was must to save the animal's life.

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