

Clinical Article

OESOPHAGEAL OBSTRUCTION (CHOKES) IN GOAT (CAPRA HIRCUS) AND ITS SURGICAL MANAGEMENT

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Abstract: A three year old female goat was presented with history of not taking feed, salivation, regurgitation of feed and water and bulging of palpable mass in left lateral cervical part of oesophagus. Computed radiography confirmed the location of the obstruction to be within the cervical oesophagus. Oesophagotomy was performed, intra luminal abscess was drained and the foreign body was successfully removed.

Keywords: Choke, Goat, Intra luminal abscess, Oesophagotomy, Radiograph.

Introduction

Obstruction of esophagus is common in ruminants however rare in small ruminants (Sankar *et al.*, 2010). Obstruction of the oesophagus (choke) prohibits the eructation of ruminal gases and develops severe free gas bloat which may lead to life threatening if not treated in time (Prakash *et al.*, 2014). This case report describes about oesophageal obstruction in goat due to intra luminal abscess caused by metallic foreign body in the wall of oesophagus.

Case history and observation

A three year old female goat was presented to the Teaching Veterinary Clinical Complex, College of Veterinary and Animal Science, Bikaner (Rajasthan), India with the history of not taking feed, salivation, restlessness, regurgitation of feed and water through nostrils since 4 - 5 days, bulging of palpable mass in left lateral cervical part of esophagus and mild tympany. Temperature was higher than normal range. Computed radiograph was taken for confirmatory diagnosis (Fig. 1).

Depending upon the history, clinical examination and computed radiographic examination, the case was diagnosed as cervical oesophageal obstruction due to intra luminal abscess

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caused by metallic foreign body in the wall of oesophagus and surgical intervention i.e. oesophagotomy was planned.

Surgical Management

Animal was secured in right lateral recumbency. Surgical site was prepared aseptically and 2% lignocaine hydrochloride was infiltrated around the swelling to achieve local analgesia. Longitudinal incision was made along the superior border of the jugular furrow over the swelling between sternocephalicus muscle and trachea. Oesophagus was exposed and temporary ligature was applied distal to the obstruction to avoid regurgitation by using intestinal clamp. Incision was made on the swelling. Through the incision, abscess was drained (Fig. 2), dressed with povidone iodine solution and metallic foreign body was removed. The mucous membrane was sutured by using simple interrupted pattern (In out- out in) using No. 0/2 chromic catgut, sub mucosa and muscularis were opposed with simple continuous pattern using No. 0/2 chromic catgut. Temporary ligature was removed and checked for any leakage. The skin was apposed with vertical mattress sutures using No.1 nylon. Post operatively, feed was withheld for 5 days and animal was maintained with Normal Saline and Ringers Lactate @ 15ml/kg body weight intravenously. Amoxicillin-Cloxacillin combination @ 500mg intramuscularly twice daily and Meloxicam @ 0.3 mg/kg body weight for 7 days. On 10th post-operative day animal recovered uneventfully.

Discussion

Intra-luminal oesophageal obstruction may occur due to vegetables, phyto bezoars (Tyagi and Singh, 1999), pieces of leather or rubber (Salunke *et al.*, 2003), coconut (Madhva Rao *et al.*, 2009), palm kernels (Hari Krishna, 2011), mango (Vishwanatha *et al.*, 2012), ingestion of cloth or rexin material in buffaloes (Sivaprakash, 2003), and Trichobezoars (Radostits *et al.*, 1994) however, in the present case study oesophageal obstruction occurred due to intra luminal abscess caused by metallic foreign body in the wall of oesophagus. Oesophageal obstruction in goat is rare because goats are selective feeders (Sankar *et al.*, 2010), other than that type of ration, palatability of the feed, lack of sufficient trough space, excessive rumen fill, ability of the goat to ruminate etc may be the causative agents (Anderson *et al.*, 2010). Choke was diagnosed by palpation similar to the Gangwar *et al.* (2013) and by computed radiography also diagnosed by Marzok *et al.* (2015). Most of oesophageal obstruction occurs in the cervical region similar to the present case, it may be due to the cervical part of oesophageal wall is thicker; the lumen appears as a trumpet or rosette shape and that could be

the reason for the high incidence of obstruction in the cervical part of the oesophagus (Marzok *et al.*, 2015).

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Fig. 1: Computed radiograph showing metallic foreign body (In circle) in oesophagus

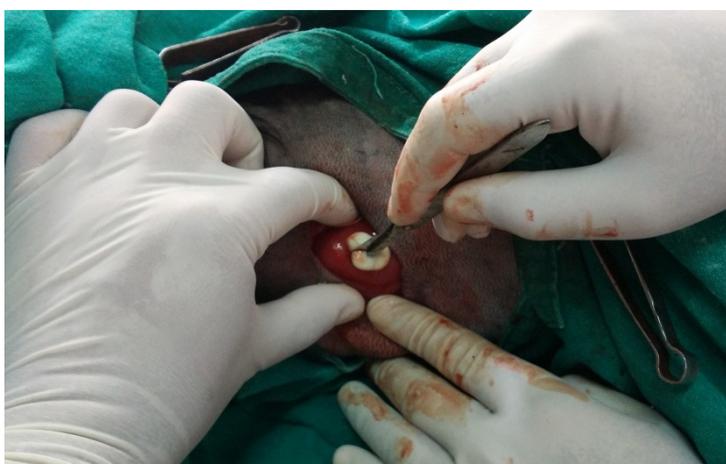


Fig. 2: Draining out intra luminal abscess of oesophagus wall