

Management of Cervical Choke Due to Beetroot – A Review of Two Cases

**S. Prakash, K. Jeyakumar, A. Kumaresan,
M. Selvaraju, K. Ravikumar and S. Sivaraman**

*Department of Clinics,
Veterinary College and Research Institute, Namakkal, Tamil Nadu - 637 001*

Introduction

In cattle, choke is an acute condition either complete or partial esophageal obstruction which requires emergency treatment, because it prohibits the eructation of ruminal gases, and develops severe free-gas bloat which may lead to life threatening if not treated in time. Intra-luminal oesophageal obstruction may occur due to vegetables, phytobezoars (Tyagi and Singh, 1999), pieces of leather or rubber (Salunke et al., 2003), coconut (Madhva Rao *et al.*, 2009), palm kernels (Hari Krishna, 2011). Esophageal obstruction occurs commonly at the thoracic inlet, but may also occur in the cervical esophagus or over the base of the heart. The present review describes the management of complete cervical choke caused by a beetroot using mouthgag.

Case history and clinical examination

A five year old Jersey crossbred cow and a 7 year old HF crossbred cow were presented to TVCC, Dept. of Clinics, Namakkal with the history of acute ruminal tympany, respiratory distress, copious drooling of saliva and inability to swallow. Clinical examination revealed that the rectal temperature, respiratory rate and heart rate were within normal range. Both the animals were coughing at regular intervals. A high pitched ping was heard on auscultation and percussion of the left paralumbar fossa due to free gas bloat. Swelling was noticed in the

mid cervical region and obstructive mass was palpated. Attempt to pass a probang in the oesophagus caudal to mid cervical region was unsuccessful. The diagnosis is made on the basis of the history, clinical signs, and the inability to pass the stomach tube in both the cases (Fig 1).



Fig.1 Application of mouth gag to relieve esophageal obstruction

Treatment and Discussion

The animals were properly restrained in a trevis and emergency ruminocentesis was performed to relieve acute ruminal tympany using a sterile 16G needle. The beetroot was removed manually through the oral cavity using Gunthers mouthgag (Fig 2).

The probang was passed freely down the esophagus into the rumen to ensure the free passage. After relieving the Choke both the animals were treated with Inj. Streptopenicillin 5gm, Inj Meloxicam @ 0.5mg/kg b.wt and Inj. Chlorpheniramine maleate @ 0.5mg/kg b.wt were administered intramuscularly for 3 days. Both the animals are recovered uneventfully and discharged.



Fig. 2 Beetroot removed from the oesophagus

In the present report, both cases having choke in the cervical esophagus. The similar site of obstruction was reported by Holfmeyr (1974) and stated that 80% of oesophageal obstruction occurs in the cervical region in cattle. Oesophageal obstruction due to a mango and its surgical management in a heifer was reported by Veena *et al.* (2000) and stated that the obstruction could be relieved easily if the obstruction is in the cervical region.

Several repeated attempt to relieve the obstruction by pushing them into the rumen with a stomach tube or probang with vigorous efforts may lead to dislodgement of the obstruction and usually result in rupture of the esophagus which may cause death of the animal. But in these cases, based on the nature of the obstructive mass, it was brought to the oropharynx and retrieved manually using mouthgag. Probang was found useful to check the patency of esophagus after the removal of the obstruction. If conservative treatment failed, the esophagotomy is indicated as reported by Meagher and Mayhew (1978) and Sreenu and Sureshkumar (2001). Ruben (1997) reported the risk of postoperative complications as wound dehiscence and fistula formation. In the present report, two cases of cervical choke caused by beetroot were relieved

manually by using mouthgag without any complication.

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