Short Communication

Surgical Management of Cervical Oesophageal Obstruction in a Non Descript Cow – A Case Report

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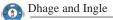
Esophageal obstruction (Choke) occurs when the oesophagus is obstructed by food, foreign body or by presence of space occupying lesion in the oesophagus . In ruminants, acute and complete oesophageal obstruction is an emergency because it prohibits the eructation of ruminal gases and bloat develops if untreated resulting in pressure on the diaphragm and preventing blood flow to the heart. The present study reports the successful management of cervical oesophageal obstruction caused by a small cucumber in a non descript cow.

CASE HISTORY AND OBSERVATIONS

A five year old non descript cow was presented with history of profuse salivation, dyspnoea and tympany following oral ingestion of a small cucumber (locally called as *shanni*). On clinical examination a hard swelling was noticed at the mid cervical oesophageal region. Rectal temperature was recorded as 101.2 ° F and auscultation revealed tachycardia and tachypnoea. Passage of a 2 cm stomach tube confirmed the seat of obstruction. Attempts to push the mass in to rumen manually by stomach tube proved unsuccessful, Hence it was decided to subject the animal for oesophagotomy.

TREATMENT AND DISCUSSION

The animal was casted on right lateral recumbency after premedicating with inj triflupromazine (Inj siquil) @ 0.1 mg/kg body weight intravenously. Surgical site was prepared aseptically and 20 ml of local anaesthetic inj Lignocaine 2% was injected to achieve analgesia by field block. A 12cm incision was made on the left side of the mass and along the dorsal aspect of jugular furrow by taking incision over skin. Sternocephalicus muscle and trachea were separated exposing oesophagus. A 8 cm longitudinal incision was made through the lateral wall of oesophagus and



the foreign body (cucumber) was removed. The mucosal layer was sutured with simple interrupted suture by using polyglactin 910 (Vicryl) No.1-0 intraluminally. The submucosa and muscularis layer were closed in one layer using a simple continuous suture pattern with polyglactin 910 (Vicryl) No 1. The muscles and skin were closed in routine manner. Post operatively animal was administered Inj. Melonex 15ml IM once a day for 5 days and Inj Intacef (ceftriaxone, Intas pharma) 3gm intramuscularly twice daily for 7 days. Feed and water was withheld for 5 days postoperatively and animal was kept on Inj Dextrose 5% (4 lit thrice daily) for 5 days. Local dressing was carried out with gamma benzene hexachoride (Lorexane) ointment on alternate days. Animal showed uneventful recovery (Fig. 1).

Oesophageal obstruction or choke is a common oesophageal disorder in cattle due



Fig. 1: Small cucumber removed by cervical oesophagotomy in a non descript cow

to incomplete mastication and rapid ingestion. Cattle produce copious amount of saliva which coats the object (apples, beets, turnips) and makes it to slip in to the pharynx and esophagus.

The primary indication for esophageal surgery in large animal is to relieve esophageal obstruction . Hass (2010) stated that obstructed airway or "Choke" most commonly occurs in cattle when animal swallows a single large object that becomes lodged in the oesophagus. He advocated to treat ruminal tympany (bloat) by trocharisation before attempting to remove any oesophageal obstruction. Holfmer (1974) and Veena *et al.* (2000) reported oesophageal obstruction in cattle due to mango and managed

it successfully by performing oesophagotomy. Sreenu and Suresh kumar (2001) reported successful surgical management of oesophageal obstruction due to tarpaulin cloth in a buffalo calf. Hawkins (2012) reported the risk of post operative complications like oesophageal stricture associated with oesophagotomy, but in the present case no such complications were observed.

SUMMARY

Successful management of a cervical oesophageal obstruction due to cucumber in a non descript cow is placed on record.

REFERENCES

- Hass, J. 2010. Esophageal foreign body in a 2-day-old calf. *Canadian Veterinary Journal*, **51:**406-408.
- Hawkins, F. 2012. Regurgitation in a sheep with an obstructive thoracic oesophageal abscess. *Veterinary Record*, **133:**248.
- Holfmer,C.F.B. 1974. Obstruction of oesophagus by tarpaulin cloth in a buffalo calf. *Indian Veterinary Journal*, **78**:243-244.
- Sreenu, M. and Suresh Kumar R.V. 2001. Obstruction of oesophagus by tarpaulin cloth in a buffalo calf. *Indian Veterinary Journal*, **78**:243-244.
- Veena, P., Ravikumar, A. and Ramkrishna, O. 2000. Oesophageal obstruction by mango in a Heifer. *Indian Veterinary Journal*, **77**:794.