

ESOPHAGEAL OBSTRUCTION DUE TO TRICHOBEZOAR IN A JERSEY CROSSBRED HEIFER- A CASE REPORT

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ABSTRACT

An one and half year old Jersey crossbred heifer was presented to the Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of recurrent bloat, copious salivation, severe respiratory distress and abdominal distension. Under local infiltration with 2% lignocaine hydrochloride, trocharization was performed on left paralumbar fossa using trochar and canula to relieve the gas from the rumen. Palpable hard mass noticed in the caudal cervical esophagus and attempt was made to retrieve with the hand through the oral cavity was unsuccessful. Oesophagogram revealed barium stasis on ventral aspect between 4th and 5th cervical vertebra. As the obstruction could not be relieved by passing a probang, cervical oesophagotomy was performed and foreign body (Trichobezoar) was retrieved without any complications.

Keywords: Trichobezoar, Oesophagotomy, Cow

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INTRODUCTION

Cervical part of esophageal obstruction due to a trichobezoar in a cow have been reported and it was regurgitated rather than ingested because of the absence of teeth marks on its outer surface (Jagdish *et al.*, 1995). Trichobezoars have been reported to cause obstruction in the lower gastrointestinal tract in a cow (Radostits *et al.*, 1994). A case of caudal cervical oesophatomy for oesophageal obstruction due to trichobezoar in a Jersey

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cross bred heifer and its successful surgical management is reported. A one and half year old Jersey crossbred heifer was presented to the Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the complaint of recurrent bloat, copious salivation, severe respiratory distress, abdominal distension and palpable hard mass noticed on caudal cervical oesophagus (Fig.1). Clinical examination revealed normal rectal temperature heat rate was 82 beats/min and respiratory rate was 66 beats /min.

A high pitched ping sound was heard on auscultation and percussion of the left paralumbar fossa suggestive of free gas bloat. Gunther mouth gag was placed in the mouth and the tongue was pulled out; the oropharynx was visualised and no abnormality was observed. Oesophagogram was done with administration of 100 gm of barium swallow. Radiographic evaluation of oesophagus revealed barium stasis on ventral aspect between 4th and 5th cervical vertebrae 30 minutes after administration of barium swallow (Fig.2). An attempt was made to retrieve the foreign body through the oral cavity while the obstructing foreign body was manipulated towards pharynx by external digital pressure; however it was unsuccessful. As the obstruction could not be relieved by passing a stomach tube and it was decided to perform caudal cervical oesophatomy oesophagotomy to retrieve the foreign body.

TREATMENT AND DISCUSSION

The left paralumbar fossa was prepared aseptically and trocharization

was performed under 2% lignocaine local infiltration to relieve free gas from the rumen. Pre operatively animal was administered with 2.5 lit of Inj.Ringers lactate intravenously and inj. Flunixinmeglumin 200 mg intravenously (1.1 mg per kg body weight) (Webster *et al.*, 2013). The animals was sedated with 0.1 mg/kg Xylazine hydrochloride and restrained in right lateral recumbency with extended neck. Following aseptic preparation of the surgical site, 15 ml of 2% Lignocaine hydrochloride was linearly infiltrated around the proposed site of operation to achieve local analgesia (Sankar *et al.*, 2022). A 7.5 cm linear skin incision was made cranial to the obstructing foreign body and cutaneous fascia was separated. The oesophagus was approached between the sterno-cephalicus muscle and trachea (Fig.3). The operative site was packed with a moistened shroud to avoid contamination. The obstructing mass was moved cranially towards the incision site and retrieved (Fig.4). The esophageal mucosa, submucosa and muscularis layers were healthy and were sutured with PGA no. 1-0 with simple interrupted pattern and subcutaneous layer was opposed with continuous pattern using PGA No.1. Skin was closed with horizontal mattress pattern using No. 2 silk. Bisection of the foreign body revealed that it was a trichobezoar with 5cm length x 4cm height and 3 cm diameter densely packed with hair and with a thin outer shell (Fig. 5). Post-operatively, the animal was administered with Inj.Streptopenicillin Procaine penicillin G 66000 U/kg IM for every 24 hrs once Donald and Pharm (2008). and Flunixinmeglumin 200mg intramuscularly for



Fig.1. Cervical Oesophageal swelling



Fig. 2. Radiographic evaluation of oesophagus revealed barium stasis on ventral aspect between 4th and 5th cervical vertebra.

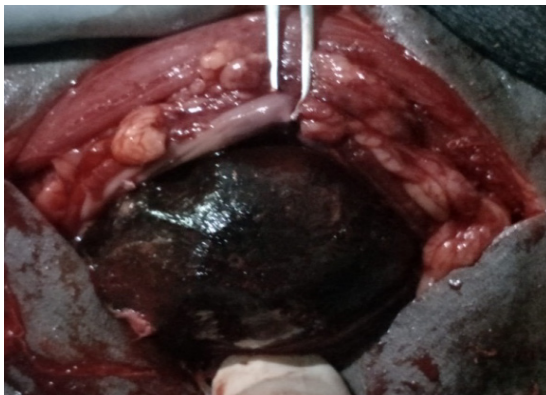


Fig. 3. Oesophagotomy- sterno-cephalicus muscle Separation



Fig. 4. Retrieved foreign body



Fig. 5. Trichobezoar (5cm length x 4cm height and 3 cm dia)- Hair and outer shell

5 days. Oral feeding was withheld and animal was maintained with Dextrose normal saline 1.5 lit and Ringers lactate 3 lit daily for 5 days. The owner was advised to give 5lit water thrice daily with 1 kg of chopped green fodder daily from 6th post operative day upto 10 days. Restricted water and concentrate feed and advised chopped green fodder from 4th day onwards up to 10 days. The cutaneous sutures were removed on the 15th postoperative day and animal recovered uneventfully without any complication. Administration of xylazine hydrochloride and local infiltration with 2% lignocaine hydrochloride provided sufficient analgesia for cervical oesophagotomy in the present case (Trim, 1987; Suresh Kumar *et al.*, 2010). Cervical part of esophageal obstruction due to a trichobezoar in a cross bred Jersey heifer due to the licking habits of their herdmates have been reported and it was regurgitated rather than ingested because of the absence of teeth marks on its outer surface.

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