

Successful Management of Oesophageal Obstruction in a Jersey Crossbred Cow

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Abstract

A Jersey crossbred non-pregnant cow was presented with a history of anorexia and dysphagia. The cow was unable to swallow anything. Physical examination and oesophageal palpation revealed an enlargement in the left lateral neck region. An attempt to pass a stomach tube failed, indicating oesophageal obstruction. After sedation and manual intervention, a foreign body composed of groundnut cake and feed material was retrieved. The condition of the cow improved following the removal of the obstruction.

Keywords: oesophageal obstruction, foreign body, groundnut cake

Introduction

Oesophageal foreign bodies in cattle are uncommon but potentially life-threatening if unattended. Ingested foreign bodies can result in dysphagia, anorexia, bloat which in turn leads to difficulty in respiratory and dehydration. Cattle are prone to swallowing foreign materials owing to their indiscriminate feeding habits, making esophageal obstruction an emergency condition in large animal practice (Constable *et al.*, 2017). Oesophageal obstruction is considered one of the more serious conditions due to the risk of dehydration, electrolyte imbalances, and bloat (Singh and Tyagi, 2012). Cases of esophageal obstruction in livestock have been documented in various species (Mohanambal *et al.*, 2018; Ravi *et al.*, 2018; Ammu *et al.*, 2019). Early diagnosis and timely intervention are crucial to prevent further complications, such as aspiration pneumonia and oesophageal rupture (Wilson and Mallinson, 2017). This case report discusses the successful removal of a feed-related foreign body from the esophagus of a Jersey crossbred cow and stresses the importance of proper feed management to prevent future occurrences.

Case History and Observation

A Jersey crossbred non-pregnant cow was presented to the large animal medicine unit of veterinary clinical complex, Namakkal with a history of not taking feed and water for a period of 24 hours. The owner reported that the cow had been unable to swallow feed and water since the previous day. Attempts to offer feed and water were unsuccessful, as the cow appeared

to struggle with swallowing and showed signs of discomfort while drinking water. There was no prior history of trauma. Profuse salivation was present and the cow exhibited repeated attempts to swallow, which were unsuccessful. Physical palpation of the neck revealed enlargement on the left lateral aspect of the cervical esophagus (Fig 1). Attempts to pass a stomach tube were unsuccessful, as it could not advance beyond the mid-esophagus, suggesting an obstruction. Rumen showed mild distention and no other abnormalities were detected. Rectal temperature, pulse and respiratory rates were within normal limits.

Treatment and Discussion

The cow was diagnosed to have oesophageal obstruction (choke) due to a foreign body, based on the history of inappetence, dysphagia and inability to pass a stomach tube. Cow was sedated using xylazine @ 0.1 mg/kg body weight intramuscularly. A Gunther's mouth gag was used. Hand was inserted into the oral cavity while external pressure was applied on the oesophagus, pushing the obstruction retrograde from the neck to the mouth. After several attempts, the foreign body, consisting of groundnut cake mixed with feed material, was successfully removed (Fig. 2). The cow was administered intravenous fluid (inj. RL @ 10 ml/kg, IV) was provided to rehydrate the cow and correct any electrolyte imbalances. The cow showed marked improvement and owner was advised to be fed only soft, easily digestible feed for the next few days to prevent further oesophageal irritation.

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Fig. 1. Swelling on the left lateral aspect of the cervical esophagus



Fig. 2. Obstructed foreign body - groundnut cake

Oesophageal obstruction in cattle, especially by foreign bodies, can present with clinical signs such as dysphagia, salivation, and anorexia. The obstruction in this case, caused by groundnut cake and feed material, which was successfully managed through sedation and manual extraction. Similar interventions are described by Ravi *et al.* (2018), where a linear rope was removed from the epiglottis of a Holstein Friesian cow, and by Mohanambal *et al.* (2018), where a sewing needle with a thread extending to the rumen was endoscopically retrieved from a goat kid. Foreign bodies lodged in the oesophagus can vary widely in both material and size, with some requiring endoscopic techniques for safe removal. However, for feed-related obstructions, manual retrieval under sedation often proves effective, as demonstrated in this case. Sedation and manual intervention is a common approach in large animal practice and has shown successful outcomes in similar cases (Ammu *et al.*, 2019; Kumar and Suthar, 2018; Ravi *et al.*, 2018 and Raju, 2020).

Conclusion

The case highlights the importance of early diagnosis and appropriate management of oesophageal foreign body obstruction in cattle. Preventive measures such as meticulous feed material preparation are essential in reducing the risk of future obstructions.

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