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Oesophageal foreign body in a cow and its surgical retrieval

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Abstract

Oesophageal obstruction (choke) is always an emergency life threatening condition which requires prompt veterinary attention to save the life of the animal. A crossbred cow of 4 years old was presented with the history of eating jack fruit and complaints of bloat, anorexia and profuse salivation for past 10 hours. On clinical examination, there was tachycardia and dyspnoea. Other vital parameters were found to be within the normal limit. Based on the history and clinical examination, the case was diagnosed as oesophageal obstruction (choke) and was decided to treat surgically. An uneventful recovery was recorded after 1 week of treatment with normal appetite and other parameters.

Keywords: Oesophageal obstruction, choke, emergency, crossbred cow

1. Introduction

Choke (oesophageal obstruction) is an emergency condition encountered in large ruminants that needs immediate veterinary attention as it blocks the oesophageal passage resulting in inhibition in the normal eructation process. It is mostly caused by large sized food stuffs, foreign objects, trichobezoars or oesophageal granulomas^[1]. The common sites of obstruction in bovines include pharynx, cervical oesophagus, thoracic inlet, base of heart and cardia^[2]. The primary indication for oesophageal surgery in large animals is to relieve oesophageal obstructions (choke) when other conservative methods of treatment fail^[3]. The present report records a case of oesophageal obstruction in a crossbred cow caused by a core of jackfruit and its surgical management.

2. Case history and clinical observation

A 4 years old crossbred cow was presented with the complaints of bloat, anorexia and profuse salivation for past 10 hours. The owner reported that the cow was offered left over part of a jackfruit and since then the cow developed symptoms of discomfort, salivation and bloat. On clinical examination, there was tachycardia and dyspnoea. Other vital parameters were found to be within the normal limit. The cow was even unable to drink water. On palpation, a hard mass was felt in the cervical part of oesophagus. Based on the history and clinical examination, the case was diagnosed as oesophageal obstruction (choke). Oesophagotomy was performed under regional analgesia. Post-operatively, a course of antibiotics (Ceftriaxone + Tazobactam) @ 15 mg/kg body weight IV daily along with antihistimincs (Chlorpheniramine Maleate) @ 15 ml IM daily and NSAID (Flunixin Meglumine) @13 ml IM daily for 5 days was prescribed.

3. Treatment and surgical intervention:

The distended abdomen was trocharised at the point of left paralumbar fossa and large amount of gas was released. An unsuccessful attempt was made to pass a stomach tube pushing the foreign body into the rumen. Hence, it was decided to remove the foreign body following surgical intervention. The cow was stabilised by infusing 3 litters of normal saline solution intravenously. Oesophagotomy was performed under regional analgesia on the left lateral cervical region over the suspected palpable obstruction site. The distended oesophagus was located and a 4 cm long incision was made longitudinally to remove the foreign body (Figure 1). Later, it was identified as the core of a jackfruit measuring 4.5 cm × 2 cm (Figure 2).



Fig 1: Surgical removal of the foreign body



Fig 2: The foreign body (core of jackfruit, 4.5cmx2 cm)

Double layer suturing pattern was followed to close the oesophagus using Polyglactin-910 (2-0). Skin incision was sutured with simple interrupted suture pattern using black braided Silk.

The cow was kept off-fed with complete withdrawal of food and water for 24 hours. Post-operatively, a course of antibiotics (Ceftriaxone + Tazobactam) @ 15 mg/kg body weight IV daily along with antihistimincs (Chlorpheniramine Maleate) @ 15 ml IM daily and NSAID (Flunixin Meglumine) @13 ml IM daily for 5 days was prescribed. The owner was advised to provide soft, palatable and chopped feed in lesser amount frequently for seven (7) days.

4. Results and Discussion

An uneventful recovery was recorded after 1 week of treatment with normal appetite and other parameters. Bovines are frequently affected by oesophageal obstruction than other animals and this is attributable to their greedy nature and peculiar indiscriminate feeding habits ^[4]. Oesophageal obstruction commonly occurs in the cervical part of oesophagus caused variety of objects like phytobezoars, vegetables, coconut, mango, rubber and leather material etc. ^[5, 6]. The foreign body causing choke in the present case was the core of a jackfruit. The obstruction was diagnosed by palpation and also by passing 2cm diameter tube. Gangwar and his co-workers in the year 2013 ^[7] diagnosed a case of choke due to trichobezoars by passing a tube and by palpation. Hence Oesophagotomy was performed. Meagher and Mayhew in the year 1978 ^[3] suggested Oesophagotomy to relieve choke that have not responded to the conservative treatment. The risk of post-operative complications associated with oesophagotomy incisional dehiscence and fistula formation must be considered if pursuing this course of treatment ^[8] but present case was recovered eventually and no such complications were seen after six (6) months follow-up.

5. Conclusion

Early diagnosis and prompt surgical intervention is the successful emergency life saving treatment option of cervical oesophageal choke with other supportive therapy.

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