

RETRIEVAL OF AN UNUSUAL FISHHOOK FOREIGN BODY
FROM THE ESOPHAGUS IN A BUFFALO

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ABSTRACT

A four-year-old female buffalo was presented with a complaint of accidental ingestion of fishhook along with fodder. The owner tried to pull out the fishhook thread during ingestion, accidentally the thread broke and, the fishhook was ingested by the buffalo. The clinical examination revealed hypersalivation and the animal was anxious to observe. Radiography on a standing animal revealed fishhook shape metallic opacity just below the 4 to 5th cervical vertebrae within the esophagus. The fishhook was removed manually without any surgical intervention with the help of the right hand under deep sedation. Recovery was uneventful and soon after the intervention the animal was observed to be almost back to normalcy.

Keywords: *Bubalus bubalis*, buffaloes, unusual, fishhook, foreign body, esophagus

INTRODUCTION

Foreign bodies in the esophageal tract have been reported to be a common emergency in bovine. The most common types of esophageal

foreign bodies are included apple, mangoes, palm kernels, turnip, potatoes, coconut, corn stalks, large sized lemon, large feed stuffs, trichobezoars and phytobezors (Fubini and Pease, 2004). Complete esophageal obstruction is an acute condition because it prohibits the eructation of ruminal gases leading to severe free gas bloat which may be life threatening if not relieved in time (Prakash *et al.*, 2014). An intraluminal esophageal obstruction is commonly seen in crossbred cows and buffaloes due to its indiscriminate feeding habits (Tyagi and Singh, 1999). The indiscriminate feeding habits of a buffalo may lead to ingestion of metallic foreign bodies. In this report, a fishhook was retrieved from the esophagus of a buffalo. A search through the literature revealed no single documented similar case of a fishhook in the esophagus of a buffalo. However, fishhook from the esophagus of dogs and cats are well documented (Binvel *et al.*, 2017).

CASE HISTORY AND CLINICAL SIGNS

A four-year-old nulliparous female buffalo was presented to the Department of Veterinary Surgery and Radiology, Faculty of Veterinary and animal Science, Banaras Hindu University, India. According to the owner, the buffalo was ingested

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by fishhook accidentally while feeding. However, the owner tried his way out to pull the string but failed to retrieve the fishhook back. Since the incident was recent the animal's water intake and feed seemed to be unaffected. However, there was hypersalivation and anxiety. All the physiological parameters like temperature (101.4°F), respiration (30/minute) and heart rate (55 beats/ minute) were within the normal range. Radiography was done in a standing animal without sedation. Two views, Lateral and Dorso-ventral views of neck were taken. The lateral radiograph revealed fishhook shape metallic opacity just below the 4 to 5th cervical vertebrae overlapping the trachea and oesophagus, however the dorsoventral radiograph confirmed the fishhook presence within the oesophagus (Figure 1 and 2). It was decided to removal manually as the location was I removal of the fishhook as the fish hook was located at cranial oesophagus.

RESULT AND DISCUSSION

The animal was sedated with inj. Xylazine 0.05 mg/Kg b. wt. Intramuscular and inj. Ketamine 2 mg/Kg b. wt. Intravenously and placed in right lateral recumbency. The neck was extended, and mouth was opened with Vernell mouth gag and the right hand was passed into it up to the esophagus through pharynx. The fishhook thread was found in the esophagus. The thread was used as a guide to identify the exact location of the fishhook. The fishhook was entangled with an esophageal wall. The esophageal wall was thick to palpate at the site where fishhook was attached. The fishhook was retrieved successfully from the esophagus with the help of hand (Figure 3). The animal recovered smoothly from the anesthesia. Inj. Enrofloxacin 5 mg/Kg B.wt. and Meloxicam 0.2 mg/Kg B.wt. were

given post-retrieval of fishhook for three days. The animal was kept on a liquid/semisolid diet for three days. The animal showed uncomplicated recovery and was eating normally without any complications subsequently.

Buffaloes might have ingested foreign bodies due to their indiscriminate feeding habit (Tyagi and Singh, 1999). Similar such incidences of indiscriminate ingestion of fishhook by buffalo was reported earlier as well (Shivprakash, 2003). The Clinical signs as hyper salivation and anxiousness expression was recorded in present study. However, symptoms in complete oesophageal obstruction were observed as extended neck, salivation, bloat, dyspnoea and swelling at ventral neck region reported by Tyagi and Singh (1999); Krishna *et al.* (2020). In the present study, the animal was taking feed and water normally might be due to incomplete obstruction of oesophagus. While complete obstruction shows anorexia and water comes out from the nostrils during drinking (Tyagi and Singh, 1999). In present study, the physiological parameters like temperature, respiration and pulse rate were within the normal range and the same finding were reported earlier on by other coworkers (Gomez *et al.*, 2014). Radiography was a reliable technique for diagnosis of metallic foreign body in the oesophagus (Binvel *et al.*, 2017). The lateral and ventro-dorsal views revealed exact location of metallic foreign body in the oesophagus. In contrast to present study, Binvel *et al.* (2017) described that a single lateral thoracic or abdominal radiograph revealed the exact location of the fishhook in all cases of dogs. Plain and contrast radiographs along with clinical sign and history helped to arrive at a definitive diagnosis of oesophageal obstruction (Jennings, 1984). The manual retrieval of fishhook always depends on the size and location of the foreign body in the oesophagus (Tyagi and Singh,

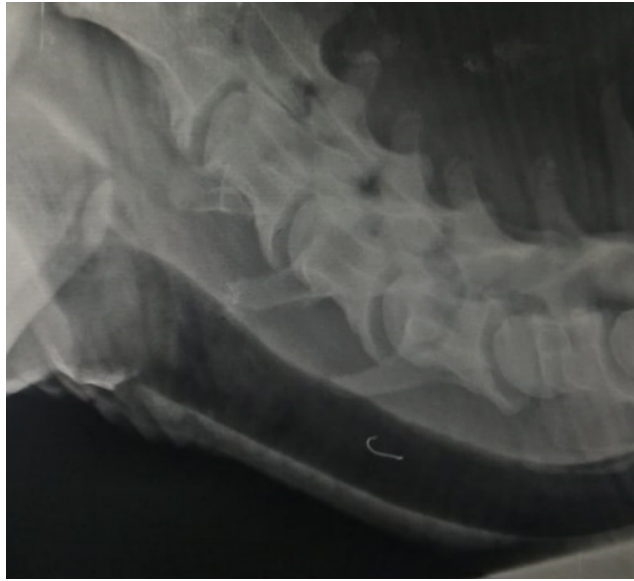


Figure 1. The lateral radiograph of neck revealed fishhook like metallic opacity at 4-5th cervical vertebrae overlapping the trachea and oesophagus.



Figure 2. The ventro-dorsal radiograph of neck revealed fishhook like metallic opacity (within oval marking).



Figure 3. The Fishhook retrieved out from the esophagus.

1999). In present study, the fishhook retrieved out manually from the oesophagus comfortably. Some studies suggested that non-invasive endoscopic removal of ingested fishhooks is highly successful in dogs even in cases of oesophageal perforation (Binvel *et al.*, 2017). Oesophageal surgery is not fruitful in large animal due to many complications such as suture dehiscence, perforation or fistula and stenosis due to scar (Ruben, 1997; Krishna *et al.*, 2011). In present study, no complications were reported with uneventful recovery.

CONCLUSION

The manual removal of fishhook was observed to an effective method of fishhook retrieval from the esophagus as the manual method is non-invasive and economic method for treatment without any complication.

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