

SURGICAL RETRIEVAL OF METALLIC GASTRIC FOREIGN BODY IN A CANE CORSO DOG

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Abstract: A six month old Cane Corso dog was presented with a history of accidental swallowing of a metallic spoon 20 hours earlier. The dog had two episodes of vomiting and exhibited restlessness. Lateral plain abdominal radiograph revealed presence of radio opaque metallic foreign body (metallic spoon) in the stomach. An emergency gastrotomy was performed through cranial mid ventral laparotomy under general anesthesia and a metallic spoon was retrieved. Post-operatively administration of fluids, antibiotics, analgesics and regular wound dressing made the dog recover uneventfully.

Keywords: Dog, metallic foreign body, stomach, gastrotomy.

INTRODUCTION

A gastric foreign body refers to any ingested material that is either indigestible (eg: rock, plastics, toys, leashes, ball, clothes, sticks), slowly digestible (bones), or incapable of passing normally through the gastrointestinal tract of dogs (Harikrishna *et al.*, 2024). The incidence of foreign body ingestion was higher in young dogs, and they easily ingest toys, bones and other objects especially those that contain food or retain food odour (Sharma *et al.*, 2017). Gastric foreign bodies were commonly encountered in dogs and cause direct physical injury to the gastric mucosa during transit or become lodged at the pylorus, resulting in acute gastritis, gastric ulceration and obstruction (Abd El Kader and Farghali, 2015). Hyper salivation, retching, gagging, vomiting, regurgitation, anorexia, pain and respiratory distress were the commonly observed clinical signs (Maggi *et al.*, 2023). Radio-opaque foreign bodies could be detected through plain radiographs, whereas radiolucent foreign bodies required contrast radiography using barium meal (Kathirvel *et al.*, 2012). Gastrotomy was indicated in retrieval of sharp foreign bodies (Harikrishna *et al.*, 2024). The present paper reports the successful surgical removal of metallic gastric foreign body in a Cane Corso dog.

CASE HISTORY AND CLINICAL OBSERVATIONS

A six month old female, Cane Corso dog weighing about 15 kg was presented to the Department of Veterinary Surgery and Radiology, NTR College of Veterinary Science,

Gannavaram with a history of vomiting and restlessness following accidental swallowing of a metallic spoon approximately 20 hours prior to presentation. On clinical examination, mild dehydration was observed while the vital parameters were within normal physiological range. Lateral plain abdominal radiograph revealed a well defined radio-opaque foreign body consistent with a metallic spoon in the stomach (Fig. 1). Based on the history, clinical signs and radiographic findings, the condition was diagnosed as a case of gastric foreign body and an emergency surgical removal was executed.

TREATMENT AND DISCUSSION:

Following confirmatory diagnosis, Ringer's lactate @ 10 ml/kg BW along with inj. Cefotaxime @ 25 mg/kg BW and inj. Meloxicam @ 0.2 mg/kg BW IV were administered 30 minutes prior to surgery. The dog was premedicated with inj. Atropine sulphate @ 0.04 mg/kg BW SC. General anesthesia was induced with inj. Midazolam @ 0.2 mg/kg BW and inj. Ketamine @ 5 mg/kg BW IV followed by endotracheal intubation. Anesthesia was maintained using 2-2.5% isoflurane in oxygen. Animal was restrained in dorsal recumbency after the surgical site was aseptically prepared. A cranial midventral laparotomy incision was made approximately 1-2 inches below the xiphoid cartilage to exteriorize the stomach. Sterile moistened gauzes were placed around the stomach. The stomach was retracted using two stay sutures and the incision was given on the least vascularised area between the greater and the lesser curvature of the stomach. An Allis tissue forceps was introduced into the stomach and the foreign body *i.e*, metallic spoon was carefully retrieved (Fig. 2). Gastrotomy incision was closed in double inversion manner using polyglactin 910 no. 2/0. Peritoneum and muscles were sutured in continuous lock stitch pattern using polyglactin no. 0 followed by subcuticular sutures with no. 2/0 polyglactin 910 and sutured the skin with polyamide no. 0 in horizontal mattress pattern.

Post-operatively, the dog was administered with inj. ceftriaxone sodium and tazobactam @ 25 mg/ kg BW IV for five days and inj. carprofen @ 4 mg/ kg BW SC for three days. Supportive fluid therapy was continued for three days using inj. Ringer's lactate @ 15 ml/ kg BW, inj. dextrose normal saline @ 10 ml/ kg BW and inj. metronidazole @ 5 mg/ kg BW IV once daily. Oral feed intake was restricted for the initial three days. Liquid diet was offered from the fourth day and slowly shifted to semi solid diet on the seventh day. Regular antiseptic wound dressing was done with povidone iodine and skin sutures were removed on 12th post-operative day.

Gastric foreign body obstruction could occur in dogs of any age; however younger animals as was in this case were appeared to be more susceptible due to their inappropriate and non-selective feeding behaviour (Nath *et al.*, 2015). In the present case, diagnosis was made on the basis of history, clinical signs and radiographic findings. Lateral plain abdominal radiography could diagnose the radio opaque foreign body within the stomach as was also indicated by Abd El Kader and Farghali (2015) and Nath *et al.* (2015). Gastrotomy was commonly preferred for the management of gastric conditions including removal of foreign bodies and gastric neoplasms (Sharma *et al.*, 2017). In this case, stomach was exteriorized through cranial mid-ventral laparotomy, similar to the technique followed by Harikrishna *et al.* (2024). In contrast, Nath *et al.* (2015) approached the abdomen through left paracostal incision. Myriad foreign bodies were retrieved by gastrotomy *viz.*, metallic spring like foreign body (Nath *et al.*, 2015), radio opaque fork (Abd El Kader and Farghali, 2015), bunch of keys (Sharma *et al.*, 2017), fish hook (Vijayakumar *et al.*, 2025), *etc.* Postoperative recovery was uneventful and the animal returned to normal appetite within a few days after the surgery. The uneventful postoperative recovery observed in this case highlights the importance of early owner presentation, prompt diagnosis, appropriate surgical management and adequate postoperative care.



Fig. 1: Lateral abdominal radiograph showing radio opaque foreign body in the stomach.



Fig. 2: Photograph showing retrieval of metallic spoon from the stomach.



Fig. 3: Photograph showing closure of gastrotomy incision in cushing's pattern

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