Endoscopic Retrieval of Cloth (Foreign Body) from the Stomach of a Dog – A Case Report

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ABSTRACT

A four-year-old male German Shepherd was presented with a history of intermittent vomiting, anorexia, and lethargy for the past two days. Abdomen palpation revealed a firm mass in the cranial abdomen. Abdominal ultrasonography identified a hyperechoic area with acoustic shadowing in the gastric region. Gastroscopy revealed cloth in the stomach, which was retrieved using an endoscopic snare. The animal showed marked improvement with resolution of clinical signs.

Keywords: Dog Stomach, Foreign Body, Endoscopic Snare, Acoustic Shadowing.

INTRODUCTION

Foreign body ingestion is considered a potential cause if a dog shows a sudden change in appetite, abdominal pain, salivation, retching, gagging, regurgitation, vomiting, respiratory distress, or restlessness, regardless of age (Gianella et al., 2009). Diagnosing and removing radiolucent foreign bodies can be challenging, but it is crucial to remove gastric foreign bodies quickly to prevent them from reaching the small intestines, where they may cause an obstruction. Bekkerman et al. (2016) recommended using a retrieval net, forceps, or a polypectomy snare for endoscopic removal of foreign bodies from the oesophagus. Vijaykumar et al. (2009) also diagnosed many types of foreign bodies, including sticks, sewing needles, toys, plastics, and metal household items, by using endoscopy. In the present case, gastroscopy was found to be an effective method for diagnosis and retrieval of foreign bodies.

CASE HISTORY AND OBSERVATION

A four-year-old male German Shepherd dog was presented to the Small Animal Medicine Referral Unit, Veterinary College and Research Institute, Hospital Namakkal, with the history of intermittent vomiting, hyperoxia and lethargy. Clinical examination showed mild to moderate dehydration. Hematobiochemical exami- nation revealed haemoconcentration and leucocytosis. Abdomen palpation revealed a firm mass in the cranial abdomen. Linear probe frequency 3.5 to 7.5 mhz showed a hyperechoic area measuring 4 cm in length with acoustic shadowing below it in the gastric region (Fig.1). Gastroscopy was performed under general anaesthesia with injection of Diazepam @ 0.5 mg/kg b.wt, IV and inj. Propofol @ 4 mg/kg b.wt, IV, maintenance with inj. Propofol @ 2 mg/kg b.wt, IV procedure continued for 20 min. A cloth piece was identified in the caudal gastric region. A snare was passed through the working channel of the endoscope, and the cloth piece was removed successfully (Fig. 2 and Fig. 3).

TREATMENT AND OBSERVATION

The dog was administered Inj. Ringer's Lactate at 10 ml/kg I/V, Inj. Ceftriaxone at 10 mg/kg body weight I/V, and Inj. Pantoprazole at 1 mg/kg body weight I/V for three days. The animal recovered without any complications. According to Fossum (2012), initial screening for the presence, type and location of the foreign body is done through radiograph. Endoscopic removal of sewing needle, metal bottle cap, linear foreign bodies from the stomach of a dog (Venkatesh *et al.*, 2023; Mohanambal *et al.*, 2018; Ravi *et al.*, 2019 and Sravanti et al., 2023). Tams and Spector (2011) stated that the retrieval of a foreign body from the stomach depends on the ability to grasp

the object and withdraw it through the cardia.

CONCLUSION

Any case of firm mass on abdominal palpation must be routinely screened using X-ray and ultrasound for a potential foreign body. Flexible endoscopy is a valuable tool for diagnosing a gastric foreign body. In the present case endoscopic snare was used effectively in holding and removing the cloth.

REFERENCES

Bekkerman, M., A H. Sachdev, J. Andrade, Y. Twersky and S. Iqbel, S. (2016), Endoscopic management of foreign bodies in the gastrointestinal tract: A Review of the literature, Gastroenterol. Res. Pract. PMC 5078654. doi: 10.1155/2016/8520767.

Fossum, T.W. (2012). Surgeries of the digestive system (4 Edn.). In: Small Animal Surgery. Mosby Elsevier, Missouri, pp. 424-427.

Gianella, P., N.S. Pfammatter and I.A. Burgener (2009), Oesophageal and gastric endoscopic foreign body removal: Complications and follow-up of 102 dogs, J. Small Anim. Pract., 50(12): 649- 654.

Mohanambal K., S.B. Reddy, G. Vijayakumar, S. Sivaraman and R. Ravi (2018), Endoscopic retrieval of a metal cap from the stomach of a Doberman pup, Indian Vet. J., 95(8): 66-67.

Ravi, R., B. Sudhakara Reddy, G. Vijayakumar, K. Mohanambal and S. Sivaraman (2019), Choke due to linear foreign body in cattle - A case report, Indian Vet. J., 96(3): 70-71.

Sravanti, M., E. Venkatesh, L. Lokesh, P. Santosh, K. Mohanambal and K.S. Kumar (2023), Successful surgical retrieval of sewing needle from stomach of a Shih TZU Dog, IJVAR, 8(4): 367-370.

Tams, T.R. and D.J. Spector (2011), Endoscopic Removal of Gastrointestinal Foreign Bodies In: Tams, T.R. and Rawlings, C.A. (Eds). Small Animal Endoscopy. 3rd Mosby. United States. pp. 245-263.

Venkatesh Atmakur, K.K. Ponnu Swamy, R. Ravi, D. Sumathi, K. Mohanambal and Kesari Raghu Ram Reddy (2024), Endoscopic diagnosis and retrieval of bone causing partial oesophageal obstruction in a dog, Int. J. Vet. Sci. Anim. Husb., 9(3):614-616.

Vijayakumar, G., A.P. Nambi, D. Sumathi, P.S. Thirunavukkarasu and S. Prathaban (2009), Endoscopic retrieval of a coin from a Dalmatian pup - A case report, Intas Polivet, 10(2): 360-362.

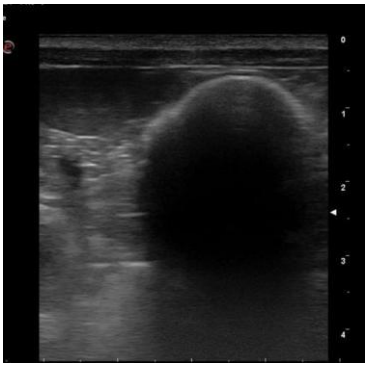

Fig.1. Ultrasonography with acoustic shadowing in gastric region.

Fig.2. Endoscopic retrieval of a foreign body by endoscopic snare.

Fig.3. Retrieved cloth from the gastric region.