Short Communication

STOMACH FOREIGN BODIES IN LABRADOR DOG AND ITS SURGICAL MANAGEMENT - A CASE REPORT

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ABSTRACT: A one year old male Labrador dog was presented with a history of frequent vomiting, inappetence, depression, restlessness and with a suspicion of ingestion of metal key ring. Ultrasonography and radiographic examination revealed radio-opaque foreign body in stomach. Hence the case was diagnosed as gastric foreign body syndrome and surgical correction was planned to remove the foreign body from stomach. Under general anaesthesia gastrotomy was conducted and the foreign bodies were removed. Post-operatively administration of antibiotics, analgesics and regular dressing of wound was done and the dog recovered uneventfully.

Key words: Dog, Foreign body, Stomach, Surgical management.

The presence of gastric foreign body is higher in young dogs due to their voracious and indiscriminate and gulping nature of feeding habits (Fossum 2007). Dogs will readily eat toys, bones and any object that either contains food or retains the odour of food. Unlike humans, dogs are susceptible to gastrointestinal obstruction due to their ability to swallow relatively large objects and pass them through the oesophagus. The most common clinical signs are persistent vomiting, partial to complete anorexia, weight loss and lethargy (Uma Rani *et al.* 2010). The present case report describes the successful surgical management of gastric foreign body in Labrador dog.

History and observations

A one year old male Labrador dog was presented with a history of frequent vomiting, inappetence, depression and restlessness. Ultrasonography and radiographic examination revealed radio-opaque foreign body suggestive of metallic object (Fig. 1 and Fig. 2). Owner suspected that the dog might have taken the key ring which was untraceable in house. It was diagnosed as a case of gastric foreign body syndrome and surgical correction was planned to remove the foreign body from stomach.

Treatment and Discussion

The dog was premedicated with Atropine sulphate @ 0.04 mg/kg body weight subcutaneously. After 5 min Xylazine @ 1 mg/kg bwt and ketamine @ 5 mg/kg bwt

were mixed in the same syringe and administered intramuscularly. The maintenance of anaesthesia was done by propofol 'to the effect'. The dog was placed on the table with dorsal recumbency after preparation of surgical site. Laparotomy was performed by incising at cranial midline, 1 inch below the xyphoid cartilage. Intraoperative palpation of stomach revealed presence of foreign bodies. The stomach was exteriorized gently and foreign bodies were removed after performing gastrotomy (Fig. 3). The foreign bodies were found to be plastic and 8 keys along with key ring (Fig. 4). Gastrotomy wound was sutured in two layers using chromic catgut No. 2-0. Submucosa along with mucosa layer was sutured with continuous suturing pattern, whereas serosa along with muscularis mucosa layers was sutured with cushing suture pattern. The stomach was washed with normal saline solution and then placed in abdomen at proper place. Laparotomy wound was closed with chromic cat gut No.1/0 using simple interrupted suturing pattern followed by subcuticular suture. Skin was apposed with mersilk No. 2/0 in cross mattress pattern (Fig. 5). Post – operatively, the dog received ceftriaxone @ 20 mg/kg bwt intramuscularly for 5 days and Meloxicam@ 0.5 mg/ kg bwt intramuscularly 3 days. Animal was further kept on Dextrose normal saline for 5 days and then subsequently shifted to liquid and semisolid diet. Sutures were removed on 10th day post operatively (Fig. 6). Dog made uneventful recovery without any complication.

Canines are quite curious and have habit of playing

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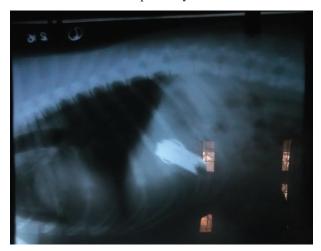


Fig. 1. Radiograph showing opaque object suggestive of metallic foreign body in stomach.



Fig. 2. Ultrasonograph showing foreign body in stomach.



Fig. 3. Photograph showing retrieval of eight keys along with ring through stomach incision.



Fig. 4. Photograph showing removed bunch of keys and polythene.



Fig. 5. Photograph showing operative site after completion of surgery.



Fig. 6. Photograph showing operative site 10th day postoperatively after removal of skin sutures.

with and eating non-food items leading to gastric foreign body syndrome (Tripathi *et al.* 2010). Foreign bodies located in the fundus of the stomach usually cause no symptoms. If they lodge in the pyloric portion of the stomach, gastric emptying may be impaired (Uma Rani *et al.* 2010). Foreign bodies cause gastric outflow obstruction, gastric perforation or systemic illness due

to break down and absorption of foreign material (Patil *et al.* 2010). Plain radiography is the suitable method for diagnosis of metallic foreign body whereas, the non-metallic foreign body diagnosis required contrast or double contrast radiography (Uma Rani *et al.* 2010). Boag *et al.* (2005) in their study recorded 50 percent of foreign bodies lodge in the stomach whereas in the study

conducted by Hayes (2009) it was only 16 per cent. Endoscopic removal was a viable treatment option but few studies had assessed the clinical and radiographic features that would be useful in decision-making and prognosis (Juvet *et al.* 2010). But endoscopic removal of foreign body was not always successful (Allman and Pastori 2013). Gastrotomy is most often indicated for treatment of stomach problems including removal of foreign objects and stomach tumors (Haragopal and Suresh Kumar 1996) and has a favourable prognosis (Sluys 1993, Horstman *et al.* 2003).

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