

GASTRIC FOREIGN BODY IN A DOG AND ITS SURGICAL MANAGEMENT

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[Received: 21.10.2014; Accepted: 05.5.2015]

A four year old male Labrador dog was presented with a history of frequent vomiting, inappetance, depression, haematemesis and melena for last 5 days. Suspecting foreign bodies lateral radiograph was taken which revealed radio opaque foreign bodies with a clear metallic spring like structure in the stomach area. It was diagnosed as a case of 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. The stomach was sutured with chromic cat gut 2-0 in continuous cushioning manner and abdomen was closed in standard manner. Post-operatively administration of antibiotics, analgesics and regular dressing of wound was done and the dog recovered uneventfully.

Key words: Dog, gastric foreign bodies, surgical management.

Introduction

Canines are quite curious and have the habit of playing with and eating non-food items leading to gastric foreign body syndrome (Tripathi *et al.*, 2010). These materials are easily swallowed, lodged in the stomach and may cause ulceration, starvation, dehydration and eventual death (Chiang and Chou, 2005). Sometimes gastric foreign bodies pose a constant threat since they cause serious damage to the lining of the stomach. The most common clinical signs are persistent vomiting, partial to complete anorexia, weight loss and lethargy (Uma Rani *et al.*, 2010). The presence of gastric foreign body is higher in pups due to their voracious and indiscriminate feeding habits (Fossum, 2007). The most frequently found gastro intestinal foreign bodies were bones, corn-cobs, stones, fruit pits, food packaging materials, children's toys, bottle caps, fish hooks and sewing needles (Senapati *et al.*, 1997; Sreenu and Kumar, 2006). In the present communication, successful surgical removal of gastric foreign bodies in a Labrador dog is reported.

Case History and Diagnosis

A four year old male Labrador dog weighing 27 kg body weight was presented with a history of frequent vomiting, inappetance, depression, haematemesis and melena for 5 days. The dog was previously medically treated with no improvement in its condition. On clinical examination the dog was dull and dehydrated with normal body temperature, heart rate and respiratory rate. Lateral radiograph revealed radio opaque foreign bodies with a clear metallic spring like structure in the stomach area (Fig.1). On the basis of history, clinical signs and radiographic findings, the condition was diagnosed as gastric foreign body syndrome and surgical removal was planned.

Surgical Treatment

The dog was premedicated with atropine sulphate @ 0.04 mg/kg body weight subcutaneously and xylazine hydrochloride @ 1 mg/kg body weight intramuscularly. General anaesthesia was induced by ketamine hydrochloride @ 10 mg/kg body weight intravenously. Animal was restrained in lateral recumbency and left lateral flank close to last rib was shaved, cleaned and prepared aseptically for surgery. Abdomen was approached through a left paracoastal incision

as per standard technique and stomach was exteriorized. Incision was given on least vascularized area of stomach and a pair of allis forceps was introduced to remove the foreign bodies (Fig.2). Foreign bodies recovered were rubber bands, trichobezoars, entangled ropes and a metallic spring of hanging clip (Fig.3). The stomach was flushed with copious normal physiological saline. The wall was sutured with chromic cat gut 2-0 in continuous cushioning manner. Peritoneum and muscles were sutured in simple continuous sutures using no.1 chromic catgut. Skin sutures were applied by silk in simple interrupted fashion. Post-operatively the dog was treated with inj. of Ceftriaxone @ 10 mg/ kg bodyweight I.M. twice daily for 5 days and inj. Meloxicam @ 0.2 mg/kg bodyweight I.M once daily. The food and water were withheld for 3 days and during this period R.L. (500ml) and 5% DNS (500ml) was given once daily for 3 days. Multivitamin inj 2 ml (Polybion®) was added to the fluids for 3 days. Water was allowed after 3rd day mixed with glucose and soup, milk was allowed from 6th day onwards. On 10th post-operative day skin sutures were removed and the dog recovered uneventfully.

Results and Discussion

Indiscriminate feeding habit predisposes the dogs to foreign body syndrome and animals at any age can suffer from gastric foreign body obstruction, but younger animals are more prone (Rasmussen, 2003). There are numerous reasons for gastrointestinal obstruction in small animals which include foreign bodies, trichobezoars, focal intestinal neoplasia and infectious peritonitis. In present case rubber bands, trichobezoars, entangled ropes and a metallic spring of hanging clip were removed from the stomach. Persistent retching, nausea, vomiting, loose faeces, constipation or history

of ingestion of inedible material raise suspicion for foreign body syndrome (Ettinger and Feldman, 2000). In the presented case there was frequent vomiting, inappetance, depression, haematemesis and melena since 5 days. Although smaller foreign bodies can pass through the gut without getting stuck, larger pieces become lodged, resulting in serious gastrointestinal complications (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). The course and onset of disease depends on site and extent of obstruction (partial or complete) (Chiang and Chou, 2005). The foreign bodies of the presented dog were entangled which created obstruction during emptying of stomach and the sharp ended spring was creating injury to stomach wall.

Abdominal palpation by itself is rarely diagnostic unless severe obstruction occurs. Metallic gastric foreign bodies are usually diagnosed by plain radiography, but positive or double contrast studies are performed to detect non-metallic foreign bodies (Uma Rani *et al.*, 2010). The lateral radiograph of the present case revealed radio opaque foreign bodies with a clear metallic spring like structure inside the stomach area. 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). In this case gastrotomy was successful in saving the life of the Labrador.



Fig.1. Lateral radiograph showing presence of sharp metallic spring inside stomach



Fig.2 Removal of foreign bodies Fig.3. Removed trichobezoars, rubbers and sharp metallic spring

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