



## Case Report

# SURGICAL RETRIEVAL OF GASTRIC-SHUTTLECOCK IN A GOLDEN RETRIEVER DOG

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**Abstract:** A one and half year old Golden Retriever male dog weighing 28 kg was presented with the history of accidental swallowing of plastic shuttlecock on previous night. Haemato-biochemical parameters were normal and contrast abdominal radiography revealed foreign body in the stomach. Gastrotomy was done and retrieved plastic shuttlecock in the pylorus region. Gastrotomy incision was closed with PGA 3-0 in double layer suture pattern. Post-operatively fluid therapy, antibiotics and analgesics were administered for five days. On 9th day sutures were removed and animal recovered uneventfully.

**Keywords:** Gastrotomy, Stomach and Golden Retriever

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## Introduction

A gastric foreign body is defined as anything ingested by dog that cannot be digested (*i.e.*, rocks, plastics, toys, leashes, balls, cloths, sticks) or that is slowly digested (bones) or that will not readily pass through the gastrointestinal tract [1]. In various cases, the owner has witnessed ingestion of the foreign bodies by the dog. Young, playful or curious and indiscriminate behavior dogs are at risk [2]. Foreign bodies cause gastric outflow obstruction, gastric perforation or systemic illness due to break down and absorption of foreign material [3]. Gastrointestinal (GI) foreign bodies are an emergency condition. The present case report describes about the successful surgical management of gastric foreign body in a Golden Retriever dog.

## Case history and observations

A one and half year Golden Retriever male dog weighing 28 kg was referred to the Small Animal Surgery Unit of Veterinary Clinical Complex, Veterinary College and Research Institute, Tirunelveli with a history of accidental swallowing of shuttlecock on the previous night and it had retching. The animal was apparently healthy on clinical examination and all the vital parameters were within the normal range. Survey radiograph of abdomen revealed radiolucent structure in the stomach and contrast radiograph of barium meal confirmed the gastric foreign body; a shuttlecock in the pylorus region (Fig.1).

## Treatment and Discussion

Pre-operative antibiotic injection of Ceftriaxone and analgesic Tramadol Hydrochloride were administered intravenously @ 20 mg/kg b.wt and 2 mg/kg b.wt respectively. The animal was premedicated with injection of Diazepam 0.5 mg/ kg followed by induction using Propofol @ 3 mg/kg b.wt intravenously. Endotracheal intubation was done and maintained with Isoflurane inhalation anaesthesia @ 2% with 100% oxygen supplementation in circle system. The surgical site was prepared aseptically. Ventral midline celiotomy incision was made from umbilicus to xiphoid region.

Stomach was exteriorized through the incision site and packed with moistened laparotomy pads. Foreign body identified in the pylorus region (Fig.2). Gastrotomy incision was made in the antimesenteric border of pyloric region and retrieved plastic shuttlecock (70mm X 28 mm) (Fig.3). Pylorus was closed using PGA 3-0 in double layer inversion suture pattern followed by omentalization. Linea alba was closed using PGA 1 in cross mattresses pattern followed by subcutaneous tissue PGA 1-0 by simple continuous pattern and skin incision closed with polyamide 1-0 in cross mattresses pattern. Post- operatively animal was maintained in partial parental nutrition for 3 days and antibiotics, analgesics and gastrointestinal protectants for 5 days. On 9th day sutures were removed and animal recovered uneventfully. Incidence of GI foreign bodies in young adult (<3years) were 29.1% and Golden Retriever 41.77% [4]. In dogs, anything goes; the relatively large size of the canine esophagus allows them to swallow objects much larger than what can safely pass through the intestines [5]. Many of the GI foreign bodies are relatively innocuous outside the body. Once ingested, however, they can wreak havoc in the intestinal tract. Based on the location, duration, size, degree of obstruction and nature of foreign bodies, the clinical signs varies from vomiting, hematemesis, dehydration, anorexia, weight loss, lethargy, abdominal pain and diarrhoea. Clinical signs of gastrointestinal foreign bodies may be less pronounced than with esophageal foreign bodies and may be intermittent. Gastrointestinal foreign bodies may have a normal abdominal palpation, or there may be a suspicious region felt or painful area noted. Vomiting often is absent if the foreign body is in the gastric fundus and does not obstruct the pylorus [6]. In this case owner himself witnessed the foreign body shuttlecock swallowed by the dog. 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 [7]. Plain and contrast radiography confirmed the location of foreign body [8]. As the size of shuttlecock was 70mm X 28mm diameter, it cannot retrieve through endoscopy and it will not pass through the jejunum. Gastrotomy is the most often indicated for treatment of stomach problems including removal of foreign objects and stomach tumors [9] and has a good prognosis [10].



Fig-1 Contrast radiography of stomach revealed shuttlecock



Fig-2 Foreign Body in the Pyloric Region



Fig-3 Retrieved Foreign Body

**Research Category:** Soft tissue surgery, foreign body in dog

**Abbreviations:** GI- Gastrointestinal

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## Conclusion

The prompt presentation, diagnosis and treatment of the case favours excellent outcome of gastric foreign body- shuttlecock in a Golden Retriever dog is reported.