Surgical Management of Gastric Foreign Bodies in Pups

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Introduction
Gastrointestinal foreign body in canines is one of the common life threatening ailments. The incidence is common and quiet high because puppies by nature love to chew and play with non food things and may intentionally or accidentally swallow these substances. The most frequently found gastrointestinal foreign bodies were bones, corn-cobs, stones, fruit pits, food packaging materials, children’s chewing toys, bottle caps, fish hooks and sewing needles (Senapati et al., 1997; Sreenu and Kumar, 2006). This paper reports about the metal ball and metal piece as gastric foreign bodies in pups and their successful surgical management.

History and Treatment
A four month old, male, Labrador pup (Case-1) and a 2½ month old male, Doberman pup (Case-2) were referred with the history of inappetance, depression, haematemesis and melena. Anamnesis revealed that the pup of case -1 swallowed the metal ball while the children were playing and the children did not reveal this to the elders as they took this accident very lightly. Clinical examination revealed that the pups were dull and dehydrated with normal body temperature, heart rate and respiratory rate and evinced pain on palpation of abdomen. Plain lateral radiography of the abdomen revealed the radio-opaque metallic gastric foreign bodies in both the pups (Fig.1 and 2). Based on the clinical and radiographic observations the cases were confirmed as gastric foreign bodies and post xiphoid site was prepared for aseptic gastrotomy

The pups were premedicated with Inj. Atropine sulphate @ 0.04 mg/kg body weight s/c and Inj. Xylazine @ 1 mg/kg body weight i/m. The general anaesthesia was induced with Ketamine hydrochloride @ 10 mg/kg body weight i/m to effect. Gastrotomy was performed as per the standard technique and removed the foreign bodies. The muscles and skin were sutured as per the standard technique. Ringer’s lactate solution was administered intravenously prior to and during surgery. Post operatively Inj. Intamox® 500 mg i/v was administered twice daily for 5 days. The animals were maintained on intravenous fluid
Restolyte-M twice daily at the rate of 10 ml/kg body weight for 5 days and allowed water and liquid diet from 6th day and solid diet from 9th day onwards. The skin sutures were removed on the 9th day and the pups recovered uneventfully.

Discussion
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. The presence of gastric foreign body is higher in pups due to their voracious and indiscriminate feeding habits (Fossum, 2007). Dogs in their excitement sometimes swallow objects thrown in the water or on the ground to be retrieved by them. Smaller foreign bodies eventually exit the stomach and pass harmlessly in the faeces with bowel movement and it usually occurs within 48 hours of ingestion. The foreign bodies that are capable of being swallowed but may not exit the stomach and instead become lodged there and left untreated usually result in ulceration, starvation, dehydration and eventually death (Chiang and Chou, 2005).

The course and onset of disease depends on where the obstruction develops and whether the obstruction is partial or complete. 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. Development of persisting retching, nausea, vomiting, loose faeces, constipation or ingestion of inedible material aroused suspicion for foreign body syndrome (Ettinger and Feldman, 2000).

Abdominal palpation by itself is rarely diagnostic unless severe obstruction occurs. Gastric foreign bodies are diagnosed by radiographic findings. If plain radiography is inconclusive, positive or double contrast studies are performed. Gastrotomy to remove foreign bodies has a favourable prognosis (Sluys, 1993 and Horstman et al., 2003). Timely diagnosis of gastric foreign bodies by x-ray examination, surgical intervention for retrieval of foreign bodies and post operative management helped in recovery of the pups in these cases.

Summary
Gastric foreign bodies in pups and successful surgical treatment are reported.

References


