

# SURGICAL MANAGEMENT OF INTESTINAL OBSTRUCTION CAUSED BY A BOTTLE CAP IN A DOG

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Intestinal obstructions are common in dogs and can occur in any part of the intestinal tract, but most often in small intestine due to its narrow lumen. The most frequently found gastro-intestinal foreign bodies are bones, corn-cobs, stones, fruit piths, food packaging materials, children's chewing toys, bottle caps, fish hooks and sewing needles (Senapati, *et al.*, 1997). Survey radiograph is useful in detecting radio-opaque materials and contrast radiography is necessary in case of radiolucent foreign bodies. This report describes on diagnosis of a case of intestinal obstruction caused by a bottle cap and its successful surgical management in a dog.

## Case History and Observations

A two year old Male Non-Descript dog was presented to the Veterinary College Hospital, Bangalore with a history of anorexia and vomition since one week and not responding to the medical treatment. On abdominal palpation a hard mass was felt at cranial abdomen and intestinal loops appeared distended. Temperature, Heart rate, Respiratory rate were within normal range. Survey radiography of lateral abdomen revealed radio-dense shadow in the cranio-

ventral abdomen (Fig.1). On the basis of clinical and radiological finding, the case was diagnosed as intestinal obstruction and decided for exploratory laparotomy.

## Treatment and discussion

Dog was prepared for aseptic surgery and premedicated with Atropine sulphate @ 0.04 mg/kg body weight subcutaneously and Triflupromazine hydrochloride @ 1 mg/kg body weight intravenously. After 10 minutes, animal was anesthetized with 2.5% Thiopentone sodium at dose rate of 25 mg/kg body weight given to effect. Cranial midline laparotomy was performed and on exploration of intestine, a hard mass was found in jejunal part. Enterotomy was performed at the antimesentric border and mass was retrieved, the foreign body was a bottle cap (Fig. 2). The intestinal lumen was closed with 2-0 chromic catgut by simple interrupted pattern and abdomen was lavaged with warm normal saline. The abdomen was closed by using No.1 polyglactin 910, subcutaneous tissue by simple continuous using No.1-0 chromic catgut and skin was approximated by horizontal mattress sutures using No.1-0 polyamide.



Fig. 1: Lateral abdomen radiograph showing intestinal obstruction Fig. 2: Retrieval of bottle cap by enterotomy

Post-operatively, ceftriaxone (20mg/kg) was given for 7 days intramuscularly BID. The animal was maintained on parenteral alimentation with ringers lactate 300 ml and Dextrose 5%, 300 ml daily twice along with Metronidazole 100 ml intravenous for three days. Animal was allowed for liquid diet on 4<sup>th</sup> post-operative day and solids on 7<sup>th</sup> post-operative day. Skin sutures were removed on 10<sup>th</sup> post-operative day and animal recovered uneventfully. Felts *et al.*, (1984) reported that diagnosis of intestinal obstruction was confirmatory by radiographs while by abdominal palpation it was rarely diagnostic. Contrast study and exploratory laparotomy helped to confirm the diagnosis of intestinal obstruction (Raghavender *et al.*, 2008). Ettinger and Feldmann (2000) reported foreign bodies in the intestine cause partial or complete obstruction and also lead to severe inflammation, mucosal laceration and pressure necrosis but in present case the foreign body was causing intestinal obstruction with no other damages.

## Summary

A case of intestinal obstruction caused by bottle cap in a dog and its successful surgical management is reported.

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