

SURGICAL MANAGEMENT OF INTESTINAL OBSTRUCTION CAUSED BY A CLOTH PIECE IN A DOG

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Introduction

Intestinal foreign bodies in dogs and cats most commonly lodge in the jejunum. Focal foreign bodies cause dilation of the intestines aboral to the obstruction and narrowing of the intestines distally. Local intestinal ischemia may occur from pressure on the wall overlying the object. Linear foreign bodies cause plication of the small intestines and may lead to extensive necrosis from ischemia or mechanical damage from the foreign body itself. Severity of clinical signs and metabolic abnormalities in affected animals depends on the degree, duration, and location of the obstruction. Signs may vary from weight loss and diarrhea to severe, intractable vomiting and death. Linear, sharp, or chronic foreign bodies may predispose animals to peritonitis and sepsis. Diagnosis is based on detection of a foreign body or persistent obstructive pattern on survey or contrast studies or abdominal ultrasound. Radiographic findings associated with linear foreign bodies include clumped or pleated intestine and multiple small, eccentrically located intraluminal gas bubbles.

Presence of free air on abdominal radiographs is indicative of peritonitis, which requires immediate surgical intervention after patient stabilization. Ultrasonography is more accurate in detecting foreign bodies than are plain radiographs. In general, early surgery reduces mortality rates in animals with intestinal foreign bodies.

Case History and Observations

A five year old Male spitz dog was presented to the Veterinary College Hospital, Bangalore with a history of anorexia and vomiting since four days and not responding to 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 gas filled intestines and contrast radiography subsequently revealed clumped or pleated intestines and the contrast agent remained in the small intestine. (Fig.1). It was decided for an exploratory laparotomy.



Fig. 1 - Radiograph showing radio dense mass in Cranio-ventral abdomen

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 antimesenteric border and mass was retrieved (Fig. 2). The foreign body was a cloth piece. The intestinal lumen was closed with 2-0 chromic catgut by simple interrupted pattern and abdomen was lavaged with warm normal saline. 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. 2 – Retrieval of cloth piece 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 4th post-operative day and solids on 7th post-operative day. Skin sutures were removed on 10th post-operative day and animal recovered uneventfully. Ettinger *et al.*, (2000) reported foreign bodies in the intestine cause partial or complete obstruction and also led to severe inflammation, mucosal laceration and pressure necrosis but in present case the marble was causing complete obstruction of intestine with no other damage.

Summary

A case of intestinal obstruction caused by Cloth piece in a dog and its successful management is reported.

References

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