

MANAGEMENT OF INTESTINAL OBSTRUCTION DUE TO NON LINEAR FOREIGN BODY IN A GERMAN SHEPHERD DOG

Talekar SH^{1*}, Padaliya NR² and Chauhan DJ³

¹Associate Professor and Head, ²Assistant Professor, ³Ph.D. Scholar College of Veterinary Science and Animal Husbandry, Kamdhenu University, Junagadh-362001, Gujarat, India
E-mail: shivaji.talekar@gmail.com (*Corresponding author)

Abstract: A six year and six months old German shepherd female dog with history of accidental ingestion of cotton ball constant vomiting since week, anorexia, colic symptoms, severe dehydration, no defecation and not responding to medical treatment since two weeks was presented to Department of Veterinary Surgery & Radiology, COVS & AH, KU, Junagadh. Radiological examination revealed no any disability. Haematological examination reveals neutrophilia, lymphocytopenia and increased levels of, WBC. Other haematological and blood serum values were within the normal limit. Surgical removal of non linear foreign body containing multiple cloth pieces under general anaesthesia. Atropine sulphate used as pre-anaesthetic, Ketamine Diazepam mixture as induction and Isoflurane in oxygen for maintenance found suitable anaesthetic protocol. Post operative follow up till removal of stitches on 12th day. History was taken up to six month but no incidence of intestinal obstruction was noted.

Keywords: Cotton ball, cloth, Intestinal obstruction and Dog.

INTRODUCTION

Intestinal obstruction in dogs is an emergency condition and has a different number of causes. Intestinal obstruction is commonly due to indiscriminate habits in dogs they can ingest foreign bodies or objects such as cloths, toys, thread, and bones etc. which enable to pass through the intestine and becomes lodged. May perforate stomach or intestines. Intestinal obstruction may be partial or complete especially in small or large intestines. Blood supply to the GI tract becomes comprised which leads to necrosis/ death of intestinal tissues and possible perforation or infection. Bacteria can spill into abdominal cavity causes septic peritonitis. Intestinal obstruction is an emergency or deadly if not catch or treated early. (Talekar *et al* 2022).

Symptoms of intestinal obstruction may be vomiting, anorexia, straining during bowel movements, diarrhea, tarry stools, inability to defecate, lethargy, burping, excessive drooling, abdominal bloating, colic, remaining still and refusing to lie down. Ingestion of objects that cannot be broken down through digestion. Rawhides, bones, toys, clothes, towels, stuffed animals, rocks, sticks, tennis balls, shoelaces, hair ties/bands and ribbon etc. Intestinal

parasites, intestinal stricture (narrowing of the intestine), gastroenteritis, abdominal tumor, hernia and Intussusception (folding of the intestine) can be life-threatening and include possible aspiration, electrolyte and acid-base disturbances, and dehydration. Depending on the underlying cause of the obstruction, the site can undergo tissue damage resulting in perforation, endotoxemia, and hypovolemic shock (Lopez *et al* 2020).

Diagnosis is based on history pet swallow something large, sharp or indigestible the best action is to induce vomiting. A physical examination will allow the veterinarian to feel the abdomen to reveal masses, intussusception, pain or foreign objects. Haematology identifies anemia or infection. Abdominal radiographs can aid in visualizing foreign bodies, tumors, and abnormal bowels. Ultrasound is another good tool to identify presence of an obstruction and its location. Barium sulfate is a metallic compound that shows up on x-ray. If the barium is blocked from flowing or is delayed in movement, this can indicate an obstruction and help to pinpoint its location. If diagnostics indicate an intestinal obstruction, exploratory surgery (Laparotomy) can be performed (often the same day) to locate and remove the obstruction. This case reports described the clinical findings and successful surgical treatment for retrieval of black natural pebble stone as an intestinal obstruction in dog (Talekar *et al* 2018).

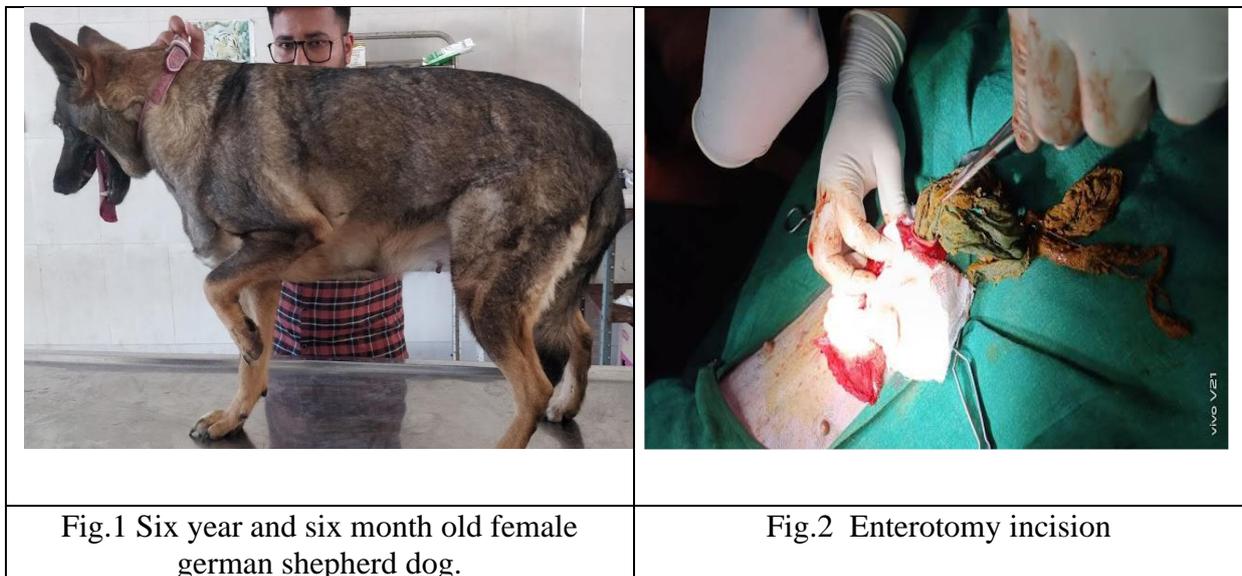
MATERIAL AND METHODS

A six year and six months year old German shepherd female dog with history of accidental ingestion of cotton ball constant vomiting since week, anorexia, colic symptoms, severe dehydration, no defecation and not responding to medical treatment since two weeks was presented to Department of Veterinary Surgery & Radiology, COVS & AH, KU, Junagadh. Clinical study reveals with heart rate, respiration rate and body temperature were within the normal limits. Haematological examination reveals neutrophilia (93 %), lymphocytopenia (5%), and increased levels of WBC (19,500/cu.mm). Other haematological values (HB 15.3 g/dl), RBC (5.88 million), PCV (41.5 %), Platelets (2, 25,000/cu/mm). Blood serum values like Total protein (6.0 mg/dl), Albumin 3.2 mg/dl, Globulin 2.8 mg/dl and ALP (26.8 IU/L), Serum creatinine (0.8 mg/dl), BUN (10.9 mg/dl) and Total bilirubin (0.50 mg/dl) were found within normal range. Radiological examination revealed no any disability. The case was very chronic and suffering since last two weeks and not responding with any medical treatment. When symptoms become very prominent and condition of dog deteriorates day by day then with owner consent planned for exploratory laparotomy.

Pre-operative adequate quantity of intravenous fluid RL 500 ml, DNS 500 ml, Metrogyl @ 44 mg/kg, Dextrose 25 % 100 ml, Dexamethasone 2 ml), PAN 40 mg I/V, Botropase 1 ml I/V, antibiotics Ceftriaxone @ 25 mg/ kg and analgesic (Meloxicalm 0.5 mg/kg) was administered for stabilization of the patient.

The ventral midline area from xiphoid region to pubis was prepared aseptically for the surgery. The dog was premedicated with Atropine sulphate @ 0.04 mg/kg body wt. S/C and mixture of Ketamine HCL @10 mg/kg and Diazepam @ 0.5 mg/kg I/V as an induction and maintained general anaesthesia with 2-3 per cent Isoflurane with oxygen. Successfully removed non linear foreign material with multiple pieces of clothes with Enterotomy incision on dilated bowel on proximal side. Closure of incision with routine manner. Post operatively intravenous fluids DNS, RL, D 25% and Metrogyl for rehydration, Ceftriaxone antibiotic for five days and Melonex as a pain killer for three days. With held water intake for two days and food for five days. The dog showed progressive signs of improvement in the post operative period. The skin sutures were removed 12th day post-operatively and the animal made an uneventful recovery.

Figures



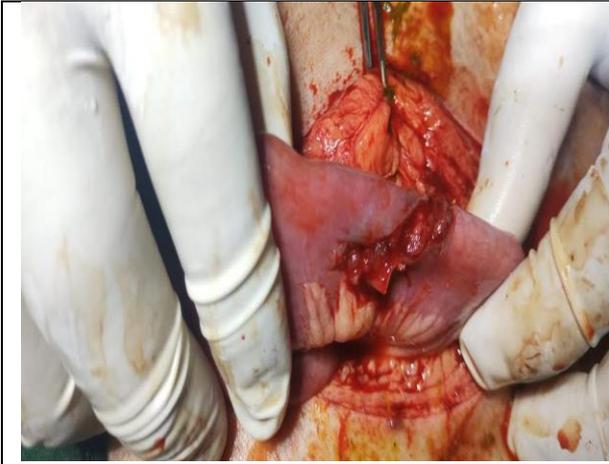


Fig. 3. Enterotomy incision

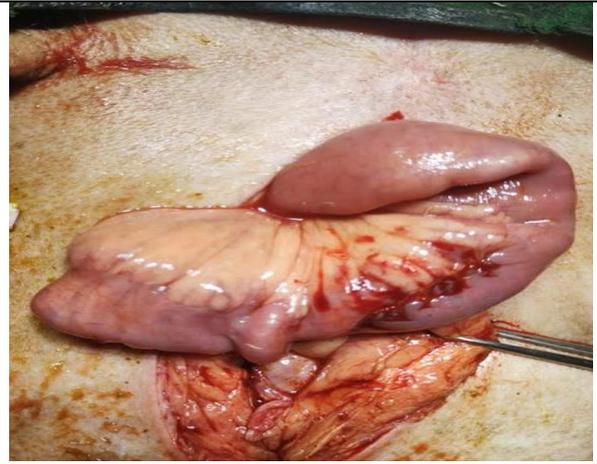


Fig. 4 Closure of enterotomy incision



Fig.5 Skin sutures.



Fig. 6 Retrieved of non linear foreign body

CONCLUSION

Intestinal obstruction due to cloths is commonly found in dog due their curious nature and notorious habits of chewing different articles other than food. In this case a report clinical sign of constant vomiting, anorexia, colic symptoms, severe dehydration, no defecation and Radiological examination not confirms foreign body due to radiodense material to make decision for exploratory laparotomy. Enterotomy with full thickness incision dilated bowel on proximal side is found suitable for removal non linear foreign bodies like cloths. Canine intestinal surgery with immediate decision, with proper asepsis and post operative care by withholding water

for 2 days and food at least 5 days gives uneventful recovery. Post operative care with proper rehydration, pain killer and suitable antibiotic therapy helps fast recovery of patients.

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