

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

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A six year and six months old German shepherd female dog with history of accidental ingestion of cotton ball while playing and showing symptoms 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, COVSAH, Kamdhenu University, Junagadh. Radiological examination is not confirmed foreign bodies but according to symptoms and with owner concern decide to exploratory laparotomy. Surgical removal of non linear foreign body containing multiple cloth pieces under general anaesthesia was performed. Post operative follow up till removal of stitches on 12th day was done. History was taken up to six month but no complication was noticed.

Keywords: Cotton ball, Cloth, Intestinal obstruction, Dog.

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 (Eastwood *et al.*, 2005). Symptoms of intestinal obstruction may be vomiting, anorexia, straining during bowel movements, diarrhea, tarry stools, inability to defecate, lethargy, burping, excessive drooling, abdominal bloating, and colic, remaining still and refusing to lie down. Ingestion of objects, Rawhides, bones, toys, clothes, towels, stuffed animals, rocks, sticks, tennis balls, shoelaces, hair ties/bands and ribbon etc. (Hayes *et al.*, 2009 and Khan *et al.*, 2014). Sometimes others etiology of foreign body is intestinal parasites, intestinal stricture (narrowing of the intestine), gastroenteritis, abdominal tumor, hernia and intussusception (folding of the intestine). Above all etiological factors were 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, Launcelott *et al.*, 2019 and Hobday *et al.*, 2014).

This case reports described the clinical findings and successful surgical treatment for retrieval of non linear foreign body containing multiple cloth pieces as an intestinal obstruction in a dog.

Materials 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, COVSAH, Kamdhenu University, 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). 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 not confirmed foreign body lodged in the intestine. 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, Metroglol @ 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. 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. Diazepam @ 0.5 mg./kg. I/V as an induction and general anaesthesia was maintained 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 Metroglol for rehydration, Ceftriaxone antibiotic for five days and Melonex as a pain reliever 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.



Fig.1 Enterotomy incision



Fig. 2. Enterotomy incision

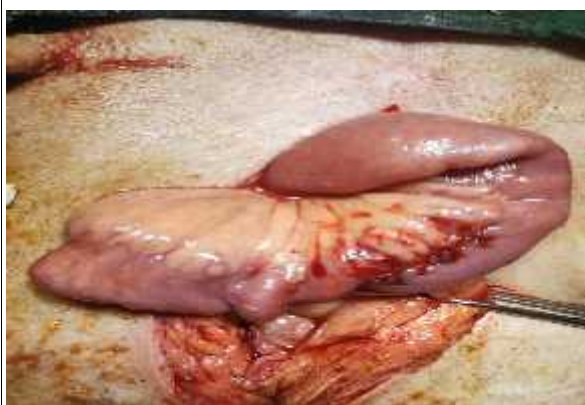


Fig. 3 Closure of enterotomy incision



Fig. 4 Retrieved of non linear foreign body

Results and Discussion

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 clinica 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.

References

- Eastwood, J.M., McInnes, E.F., White, R.N., Elwood, C.M. and Stock, G. (2005). Caecal impaction and chronic intestinal pseudo-obstruction in a dog- A case report. *J. Vet. Med. A Physiol. Pathol. Clin. Med.*, **52**(1): 43-44.
- Hayes, G. (2009). Gastrointestinal foreign bodies in dogs and cats: a retrospective study of 208 cases *The J. Small Anim. Pract.*, **50**(11): 576-583.
- Khan, A., Gazi, M.A., Bashir, S., Dumralia, D.M. and Bagate, M.S. (2014). Radio-diagnosis of fecoliths and its non-surgical management in dogs: *J. Adv. Vet. Anim. Res.*, **1**(1): 21-23.
- Lopez, D.J., Hayes, G.M., Fefer, G., *et al.* (2020). Effect of subcutaneous closure technique on incisional complications and postoperative pain in cats undergoing midline celiotomy: a randomized, blinded, controlled trial. *Vet. Surg.*, **49**(2): 321-328.
- Launcelott, Z.A., Lustgarten, J., Sung, J., Samuels, S., Davis, S., Davis, G.J. (2019). Effects of a surgical checklist on Decreasin incisional infections following Foreign body removal from the gastrointestinal tract in dogs. *Can. Vet. J.*, **60**(1): 67-72.
- Hobday, M.M., G., Pachtinger, K., Drobatz, R., Syring. (2014). Linear versus non-linear gastrointestinal foreign bodies in 499 dogs: clinical presentation, management and short-term outcome. *J. Small Anim. Pract.*, **55**(11): 560-565.