LODGEMENT OF GASTRIC FOREIGN BODIES AND THEIR RETRIEVAL IN DOGS – ELEVEN CASES

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Different cases of dogs with foreign body lodgement in stomach were presented in a period of two years. Symptoms were inappetance, vomition , dehydration and weakness for several days. Thorough physical examination along with radiological and ultrasonography examination were done. Haematological and biochemical parameters were estimated to evaluate general body condition of the patients. After confirming the cases of lodgement of foreign bodies, it was first attempted to remove the foreign bodies through vomiting. In two cases, the foreign bodies were evacuated through vomiting by administering emetic. The cases where emetics failed, the animal were prepared for surgery following standard procedure and gastrotomy was done to remove the different foreign bodies.

Keywords: Dog, Foreign body, Gastrotomy..

Gastrointestinal foreign bodies are commonly encountered in companion animal practice and may present with a variety of clinical signs depending on the location, the degree and the duration of the obstruction (Remya *et al*., 2023). Gastrointestinal obstruction in dogs leads to disturbance in fluid balance, acid-base status and serum electrolyte concentration due to hyper secretion and sequestration within the gastrointestinal tract which is again deteriorated by vomition and impaired oral intake of fluid and nutrients (Saharan and Mathew, 2020). Depending on the size and type of the foreign body, blockage can be either complete or partial. Various treatment options have been suggested depending on the type of foreign material and the possibility of gastrointestinal tract obstruction (Pratt *et al*., 2014). Here, gasrotomy was done to remove the different foreign bodies from the stomach of dogs.

Case History and Observations

Different dogs of varying age, gender and body weight were presented with clinical symptoms of inappetance, vomition, dehydration and weakness for several days. History of foreign body ingestion was found in five cases. Thorough physical examination along with radiological and ultrasonography examination (Fig.1 and 2) were done in all the eleven cases. Haematological and biochemical parameters were estimated to evaluate general body condition of the patients. After confirming the cases of lodgement of foreign bodies, it was first attempted to remove the foreign bodies through vomiting. In two cases, the foreign bodies were evacuated through vomiting by administering hydrogen peroxide mixed with water orally. In rest of the cases where emetics failed, the animals were prepared for surgery following standard operating procedure and gastrotomy was done to retrieve the obstructing foreign bodies.

Surgical Treatment

The dog was kept in fasting for 12 hours. The animal was premedicated with inj. Glycopyrollate @ 0.01 mg/kg bwt, inj. Butorphanol @ 0.2 mg/kg bwt intramuscularly (IM). Then it was sedated with dexmedetomidine @ 5mcg/ kg bwt

intravenously (IV). Anaesthetic induction was done with Inj Propofol @ 4 mg/kg bwt IV and it was maintained with 1.5 % isoflurane. Animals were kept in right lateral recumbancy and prepared under standard operating procedure for surgery. A left paracostal incision of 2- 5 inches long depending upon the size of the animal were made over the skin extending from 1-2 inches distal to the transverse process of lumbar vertebrae parallel to the last rib up to the level of tip of the last rib. The abdominal muscles were incised. Using abdominal retractor a space was created and the stomach was brought over the incision site. Sterile gauze were placed around the stomach. A vertical incision of varying length was done over the greater curveture of the fundus of stomach. The lumen of stomach was searched for the foreign body. The foreign body was retrieved from the stomach. The incised wound over the stomach cleaned with normal saline. Stomach wall was sutured using chromic catgut no. 1 to 1-0 by cushing pattern (Fig. 3). The abdominal incised wound was closed using polyglactin-910 (Vicryl) no 1 to 1-0 as per the case using simple continuous pattern. Skin was apposed using polyamide suture (Trulon) no. 2 to 1-0 by simple interrupted patern.

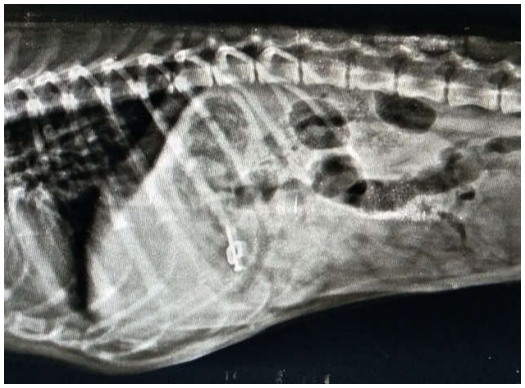

Fig.1 : X-ray image showing presence of metallic foreign body in stomach

Fig.2: USG image of showing presence of rubber material in stomach

The incision site was painted with povidone iodine solutions, then mupirocin ointment was applied. Post operatively, the animals were administered with Inj. Ceftrixone sodium + tazobactum @ 25 mg per kg bodyweight, Inj. Amikacin @ 15 mg per kg body weight for 7 days, Inj. Meloxicam @ 0.2 mg per kg body weight for 3 days. The animals were maintained only with intravenous infusion of dextrose normal saline without supplying food for 3 days. Soft liquid diet was started from 4th day up to two weeks. Regular dressing was done and abdomen was covered with a thin cloth. The owners were advised to give control and divided feeding. Sutures were removed on 10-12 days of surgery.

Results and Discussion

Different foreign bodies like facemask buckle, key ring, small toys, metallic pin, metallic wire, coin, rubber ball, eraser and stones were retrieved from the stomach of different cases which is also mentioned by Das and Pradhan, 2016, Raghunath *et al*., 2016 and Mahesh *et al*., 2019. The dogs recovered successfully and normal appetite was noted after few days of surgery. The dogs were followed up for 6-8 months and no complication was found which is also recommended by Saharan and Mathew, 2020 and Remya *et al*., 2023.

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