

SUCCESSFUL REMOVAL OF FISH AQUARIUM SAND THROUGH GASTROTOMY IN A GOLDEN RETRIEVER DOG

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A six year old female Golden retriever dog was presented with complaint that the pet had taken fish aquarium sand kept for sun light drying on terrace. History revealed frequent vomition with sand particles, inappetance, depression, not passing stools for last three days. Lateral abdomen radiograph revealed radio opaque material in the stomach and also partially in intestinal loops. The case was suspected for sand consumption and decided to perform gastrotomy to evacuate the sand under general anaesthesia. The gastrotomy wound was closed in a routine pattern. Antibiotic, analgesic, multivitamin injections and fluid administered post operatively, after three days dog allowed for liquid diet and then solid. After 10 days sutures were removed and animal recovered uneventfully.

Keywords: Dog, Fish-Sand, Gastrotomy.

Indiscriminate feeding habits predispose the dogs to foreign body syndrome and animal at any age can suffer from gastric foreign body obstruction (Tripathi *et al.*, 2010). Canines are quite curious animals and incidence of ingestion of foreign body is common. The engulfment of foreign bodies may be accidental or due to bad habit. The chances of ingestion of foreign body are observed to authors found different materials during gastrotomy such as mango seeds, nylon rope, sand (be more if the dog has simultaneous habits of alotrophagia due to worm load (Sigh *et al.*, 2010). Many Singh *et al.*, 2010). Irregular rough stones (Tripathi *et al.*, 2010). Bottle cap (Sureskumar *et al.*, 2010), disposable plastic ear buds, garden pebbles, socks, plastic medicine dispenser, plastic wall hooks (Patil *et al.*, 2010). Corn cobs, fruit pits, food packing materials, fish hooks, sewing needle (Sreenu and Kumar, 2006). Metal ball, metal piece (Umarani *et al.*, 2010). Rubber bands, trichobazars, entangled ropes and metallic springs of hanging clips (Nath *et al.*, 2015). Key ring with doll (Das and Pradhan, 2016). This present paper reports about successful surgical removal of fish aquarium sand from stomach in a golden retriever dog.

Materials and Methods

A six years old, female golden retriever weighing around 46 kg was presented with a history of frequent vomition, inappetance, depression, restlessness and not passing stools since three days. Owner claimed that dog was bathed and left on the terrace for drying it but consumed fish aquarium sand kept for sunlight drying. The dog was treated by local Vet, but no improvement in condition. On clinical examination, dog was dehydrated, sunken eye ball with normal body temperature, heart rate and respiratory rate. Presurgical hematology and biochemistry revealed Hemoglobin 18.9 gm/dl, R.B.C. 9.31 million/cumm, P.C.V 61.4 %, Platelet Count 2.16 lakhs/cumm, W.B.C. 20,600 cells/cumm, differential count like Neutrophils 90 %, Lymphocytes 07 %, Eosinophils 02 %, Monocytes 01 %, Basophils 00 %, Blood urea nitrogen 16.0 mg/dl, Serum Creatinine 1.1 mg/dl, SGPT 25 IU/L, Alkaline Phosphatase 81 IU/L. Radiograph of lateral abdomen revealed radio opaque material in the stomach and also in the intestinal loops (fig.1.) on the basis of history, clinical signs and radiographic findings the condition was confirmed that sand was present in the stomach of dog and surgical removal was planned.

The dog was Premedicated with inj.Atropine sulphate @0.045 mg/kg body weight S/C, inj.Diazepam@1mg/kg body

weight I/V, After 10 min, mixture of Inj.Ketamine @5mg/kg and Inj. Propofol @4mg/kg body weight I/V given to effect. Animal was restrained in dorsal recumbency and post xiphoid site was prepared for aseptic gastrotomy. The gastrotomy performed as per standard technique, sand removed from stomach specially from pylorus end. The stomach was flushed with normal saline solution. The stomach wall was sutured with

chromic cat gut no 2-0 in continuous Cushing fashion. Peritoneum and muscle were sutured in simple interrupted suture pattern using "Vicryl" no 1. Skin was opposed with horizontal mattress suture applied by using monofilament polyamide no-1. Inj.Meloxicam @0.2mg/kg I/M and Inj.Ceftriaxone @25mg/kg I/V as a preemptive analgesia and prophylactic antibiotic respectively.



Fig:1: lateral radiograph of abdomen showing radio opaque material lodged in the stomach and intestines.

Post operatively dog was treated with Inj. Ceftriaxone and tazobactam @25 mg/kg body weight I/V twice daily for 5 days and Inj.Meloxicam @0.2mg/kg body weight I/M once a day for 3 days . The food and water withheld for 3 days during this period and the dog was maintained with parenteral administration of RL and 5% dextrose twice daily for 3 days with multivitamins injections. Animal allowed taking water and milk on 4th and 5th day and solid food by 7th postoperative day. Dog passed stools on 5th day, Wound dressing was done on alternative days, and skin sutures were removed on 10th post-operative day and dog recovered uneventfully.

Results and Discussion

Gastro intestinal foreign body in dogs is one of the common life threatening ailments. The incidence is common and quite high because dog have a nature to chew and play with non-food things and may intentionally or accidentally swallow those substances as also reported by Umarani *et al.*

(2010). The course and onset of disease depend on where the obstruction develops and whether the obstruction is partial or complete. Foreign body located in fundus of the stomach usually cause no symptoms, if they lodged in the pyloric portion of stomach gastric emptying may be impaired, consequently it leads to development of persisting retching, nausea, vomiting, loose faces, constipation or ingestion of inedible material as also recorded by Etinger and Feldman, (2000).

If delay in diagnosis of gastric foreign body leads to obstruction of gastric out flow, gastric perforation or systemic illness due to break down and absorption of foreign material may occur as mentioned by Nath *et al.* (2015) also. The sharp edged foreign body causes damage to wall of stomach leading to hematemesis, inflammation, laceration and partial necrosis. Timely diagnosis of gastric foreign material by radiological examination, immediate surgical intervention for removal of sand and post-operative management

helped in recovery from the condition in this patient.

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