

GASTROSCOPIC RETRIEVAL OF FOREIGN BODIES IN THREE DOGS

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SUMMARY

Three dogs of various breeds and age were presented with the history of anorexia and abdominal pain. Ultrasonographic and radiological examination confirmed presence of various foreign bodies in stomach region. Gastroscopy was performed under general anaesthesia and the foreign bodies were successfully retrieved using alligator forceps and snare.

Key words: Canine, radiography, ultrasonography

Gastrointestinal endoscopy is defined as the direct visualization of the digestive tract, with or without therapy (Twedt, 2003). The development of flexible fiberoptic endoscope has been considered as a solution to various problems of the gastrointestinal tract, as endoscopy allows more thorough and less invasive inspection of the interior surface of oesophagus and stomach. Also this is minimally invasive, atraumatic technique which helps in collecting biopsy sample, cytologic samples or fluids from these areas and permits descriptive or photographic documentation of the severity and extent of lesions. The patient should always be positioned in left lateral recumbency for gastroscopy. The antrum and pylorus are kept away from the tabletop which significantly improves the endoscopist's ability to completely examine and more readily traverse these structures with the endoscope (Todd, 2005). The present study reports the successful retrieval of gastric foreign bodies in three dogs using endoscopy.

Three dogs *i.e.* a two months old Saint Bernard pup, a three years old German shepherd dog and a two years old Pit Bull were presented to the university teaching hospital with the history of anorexia, vomiting and abdominal pain. The detailed history revealed swallowing of 3 socks and a ball by the Saint Bernard pup and Pit Bull, respectively. All the dogs were dull and showing the signs of abdominal pain. Based on the history and clinical signs, all the cases were tentatively diagnosed as cases of foreign body ingestion. Plain radiography of Saint Bernard pup revealed distended stomach with soft tissue mixed density contents (Fig. 1), while small radio-opaque foreign bodies were visualized in the pyloric region in German shepherd dog (Fig. 2) and a ball like structure in the pyloric region of Pit Bull dog (Fig. 3) The dogs were prepared for ultrasonographic examination, ultrasonography revealed hypo-echoic dark shades of the foreign body (Fig. 4) in the stomach of Saint Bernard and Pit Bull dog. Based on the diagnosis, gastroscopic retrieval of foreign bodies was decided under general anaesthesia.

All the dogs were pre-medicated with Inj.

Atropine sulphate @ 0.045 mg/kg I/M. Ten minutes later, general anaesthesia was induced with Inj. Xylazine hydrochloride @ 1 mg/kg combined with Inj. Ketamine hydrochloride @ 5 mg/kg I/M. The dogs were restrained in left lateral recumbency and the mouth was kept open with the help of mouth gag and muzzle tape. Endoscopic insertion tube was thoroughly lubricated with the help of lignocaine hydrochloride gel and was gently inserted into the mouth. The insertion tube slowly progressed into oesophagus and then into the stomach.

Saint Bernard pup: After searching into the stomach, a cloth like material was visualized (Fig. 5) and the same was tried to retrieve out with the help of alligator forceps but was unsuccessful. Finally the material was grasped with the help of a snare and removed. Similarly 5 socks were retrieved out of the stomach. Thorough visualization of the stomach also revealed some haemorrhagic spots on the stomach and oesophageal wall and a bile mixed fluid in the stomach. The owner was advised to bring the pup again after two days for follow up gastroscopy. Gastroscopy after two days does not revealed any foreign body in the stomach and the haemorrhagic spots were seen to be healing.

German shepherd dog: Upon gastroscopy, food particles, undigested water melon, pieces of plastic and two pieces of earthen pots were visualized. Pieces of plastic, some pieces of water melon and earthen pots (Fig. 6) were retrieved out with the help of the snare.

Pit Bull dog: The small rubber ball was grasped with the help of a basket and was retrieved out of the stomach (Fig. 7).

Oesophagus and stomach was thoroughly visualized in all the dogs to check for damage and haemorrhages on the oesophago-gastric wall.

Owners were advised to withhold the solid food for two days and to give ice cubes and ice cream. Post operatively, all the dogs were treated with Inj. Cefotaxim @ 25 mg/kg I/M, Inj. Pantoprazole @ 1 mg/kg I/V BID and Inj. Vitamin B-complex 1ml I/M for 5 days, Inj.

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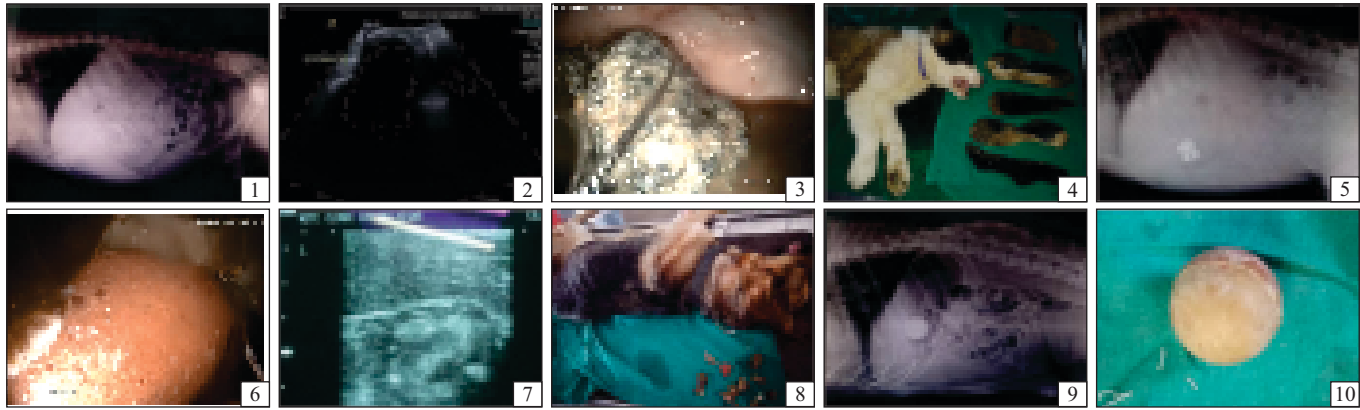


Fig. 1-10: 1: Ultrasonogram showing hypo-echoic dark shadow in stomach); 2: Stomach filled with cloth like material (shadow in stomach); 3: Photograph showing cloth like material in stomach of Saint Bernard pup); 4: Photograph showing 5socks retrieved from stomach of Saint Bernard pup); (Fig. 5: Radiograph showing multiple radio-opaque densities in pyloric region of german shepherd dog)(Fig. 6: Photograph showing pieces of earthen in stomach; (Fig. 7: Photograph showing pieces of earthen pot and watermelon; (Fig. 8: Radiograph showing radio-opaque ball in stomach of pit bull) (Fig. 9:Ultrasonogram showing Radio-opaque ball in stomach) 10: Ball retrieved from stomach of pit bull dog)

Ethamsylate @ 250mg I/M, Inj. Dextrose Normal Saline I/V BID and Inj. Ringers Lactate I/V BID for three days. Owners were advised to give Sucralfate P/O daily for five days and to feed soft diet post treatment. All the dogs recovered uneventfully within three days and started taking the food from the next day onward. Endoscopy is the most efficient technique of non-invasive foreign body retrieval (Baranidharan, 2013). It also avoids post-operative complication of oesophagotomy and gastrotomy and prevents many fatalities in veterinary practice. In the present study also, endoscopy was found to be an ideal technique for non-invasive retrieval of non-potential foreign bodies in three dogs.

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