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Clinical Case Report

Strategic Retrieval of Foreign Body in a Labrador Dog

MG Jayathangaraj[1]*, F Sebastin Raju[2] and P Saranya[2]

[1]Professor, Veterinary Clinical Complex, School of Veterinary and Animal Sciences, Centurion University of Technology and Management (CUTM), Paralakhemundi, Odisha, India

[2]Assistant Professors, Veterinary Clinical Complex, School of Veterinary and Animal Sciences, Centurion University of Technology and Management (CUTM), Paralakhemundi, Odisha, India

***Corresponding Author:** MG Jayathangaraj, Professor, Veterinary Clinical Complex, School of Veterinary and Animal Sciences, Centurion University of Technology and Management (CUTM), Paralakhemundi, Odisha, India.

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Abstract

An adult male canine, with a history of swallowing two polythene bags containing newly purchased lengthy-fishes and tied with cotton thread was presented at the Veterinary Clinical Complex, CUTM and attempts were made to examine the oral cavity. Palpation at the cervical region failed to rule out any physical type of obstruction at the cervical oesphageal region and emetics were tried and the condition was retrieved finally by xylazine administration, followed by the atropine usage and there is uneventful recovery of the dog, subsequent to the therapeutic interventions.

Keywords: Foreign Body; Vomiting; Xylazine; Atropine

Introduction

It is a fact that just like toddlers, pet animals also have an increased tendency to chew anything they can get to their oral regions, thus frequently leading to a serious as well as a potentially life threatening problems in these pet animals. The pathogenesis due to the ingestion of foreign bodies by the dogs often varies, depending on the nature, size and composition of the foreign bodies consumed. Interestingly, such an issue was encountered with a Labrador breed of dog and timely presentation of case, as well as timely undertaken therapeutic interventions yielded a great success in this case and the technical features were discussed in this paper.

Case Information

An adult male dog aged 2 years and 8 months was brought to the Veterinary Clinical Complex at School of Veterinary and Animal Sciences, CUTM, Paralakhemundi, Odisha state on an emergency basis. History revealed the consumption of two polythene bags tied with cotton thread, containing long fishes inside. One hour earlier only, the incidence happened in the pet owner's house. Clinical examination revealed body temperature of 98.5°F but the dog was observed to be hyper- excited and the hyper-excitation of the dog was also confirmed by the owner of the animal, since an hour.

Subsequently, saturated solution with salt was prepared using luke-warm water and an attempt was made after proper restraint of the dog, using muzzle. However, due to the restlessness of the dog under treatment, these attempts failed to yield success in this case. Similarly, 3% hydrogen-peroxide also could not be administered, despite the adequate availability of the drug in the hospital.

Attempting for oral administration of emetic

Figure a

Finally, xylazine was successfully administered with total dose of 55.8 mg by I/M route and animal was left undisturbed in a secluded place. Without much efforts, in 13 minutes of xylazine administration the animal evinced passive vomiting and the vomitus contained the polythenae bags with fishes inside; however, in this case, remarkable bradycardia was noticed. Hence, atropine sulphate was administered at the rate of 0.5 mg/kg, in addition to the flunixin meglumine @ 2mgKg-1, given by I/M route and oral flunixin meglumine tablets were prescribed for another four days, once daily. The animal recovered uneventfully.

Treatment and Results and Discussion

Dogs have the general habit of swallowing the highly preferred feeds or sometimes, smelling-foreign bodies, without much discrimination. Atropine sulphate injection was done, subsequent to the encountering of marked bradycardia due to xylazine administration.

First, administration of xylazine was carried out by intra-muscular route in this dog, which had swallowed two tied-up polythene bags, with lengthy fishes and this approach was contradicting to the report furnished by [3], who stated that atropine was generally to be used prior to the administration of xylazine only, due to its positive impact on heart-beat frequency and breathing.

However, in this case, purposely atropine sulphate was not used before the xylazine administration, contradicting the general findings, furnished by many authors, including [4]. Atropine blocks the cardiac effect of vagal stimulation in animals. Purpose of the therapeutic intervention in this polythene bag related foreign body case was to induce an effective ejection of the ingested two polythene bags with fishes inside. The dog was already noticed in hyper excited status and this dog violently objected the administration of saturated salt solution, by oral route.

Despite the risk, high dose of xylazine was given in this case, without the prior usage of atropine sulphate. The reason assigned for such practice is that if atropine is given earlier to the administration of xylazine, as done in most of the occasions, the earlier-administered atropine might have interfered with the vomiting reflexes due to its parasympatholytic drug related effects. Since xylazine is used only for its emesis-based side effect, rather than for sedation purpose in this case, atropine was not given, prior to the encountering of the vomiting effects. In this regard, it is noteworthy to quote the report furnished by [5], who quoted that atropine prevents the reflex from stomach. However, the purpose of administration of atropine @ 0.04 mg/kg by S/C route in this case is to alleviate the marked bradycardia that was caused by the high dose of xylazine administered. Higher dose of atropine sulphate as done in this case was in accordance with the findings furnished by [6], who stated that such dose rate could help alleviate the bradycardia in dogs and the reason for the bradycardia experienced later in this case might be mainly due to the high dose of xylazine used in this case, for the purpose of foreign – body retrieval.

Appearance of whole vomitus

Figure b

Vomited Polythene bags by the dog

Figure c

Even though the usage of endoscopy with gastro intestinal fiberscope, along with foreign body retrieval forceps might be the apt one in such occasions, due to absence of this costly clinical gadget, medical intervention was done in timely manner, adapting due precautions. Such an act yielded great success in this case. Two polythene bags containing fish were vomited ultimately, without much stress by the dog. Flunixin meglumine was administered in this case for the simple reason of alleviating the probable gastritis, which might have been caused by the fins of fishes on the mucosal lining of esophageal and gastric mucosa during the routine passage in the dog and oral therapy was suggested for further continuation. Usage of flunixin in dogs was recommended in gastric disorders of dogs by [1] and others. In general, the use of flunixin meglumine inhibits the enzyme cyclo-oxygenase to decrease the formation of precursors of prostaglandins-the inflammatory mediators and possibly inhibits other local mediators of the inflammatory response also, as quoted by [2]. Oral 3% hydrogen peroxide (2.5 ml/kg with maximum dose of 45 ml or 3 table spoons) could not be attempted in this case due to the hyper-excitability of the dog because of ingestion of foreign bodies-the tied-up polythene bags with fishes

Conclusion

Therapeutic intervention was carried out successfully to retrieve foreign body from the stomach of a Labrador dog, by the strategic usage of xylazine and atropine sulphate. The resulting uneventful recovery was documented in this paper.

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