Maciej Grzegory, Krzysztof Kubiak, Jolanta Spużak, Marcin Jankowski, Józef Nicpoń, Katarzyna Michlik, Igor Maksymovych* ©

Department of Internal Diseases with Clinic for Horses, Dogs and Cats, Faculty of Veterinary Medicine, University of Environmental and Life Sciences, pl. Grunwaldzki 47, 50-366 Wrocław, Poland

*Lviv National University of Veterinary Medicine and Biotechnologies named after S.Z. Gzhytskyj, Lviv, Ukraine

FOREIGN BODIES IN ESOPHAGUS - CASE REPORTS

Abstract. Foreign bodies in the esophagus constitute a problem in dogs. Sharp objects and objects which lead to necrosis of the esophagus wall can cause a perforation with leakage to the surrounding tissues, thereby resulting in infection and inflammation. Clinical signs depend on the extend of injury of the esophagus mucose membrane. The characteristic signs of injury of the esophagus injury are: regurgitation, dysphagia, hypersalivation and changeable appetite.

Key words: Foreign bodies, esophagus, dogs, cats

Introduction

Esophageal foreign bodies are a frequent clinical problem in dogs and, to a lesser extent, cats. The most common esophageal foreign bodies found in dogs are bones or bones fragments, fish hooks, needles, sticks, whereas play objects are more commonly found in cats (1, 2). Retained foreign bodies cause partial or complete mechanical obstruction. Severity of clinical signs is related to the size of the foreign body and duration of esophageal obstruction. Esophageal muscle spasm and tissue edema occur around the foreign body, making passage more difficult. Mucosal abrasion, laceration, and perforation may occur with sharp or angular objects. Sustained pressure necrosis may also cause fistula formation, stricture, and perforation (3). Small foreign bodies may be easily passed, and signs are not observed. Other objects cause signs of partial to complete esophageal obstruction (3). Main clinical signs are: regurgitation of food and water, hypersalivation, dysphagia, odynophagia, persistent gulping or swallowing movements, anorexia from esophageal pain, respiratory signs from airway, eructation, mediastinitis, or aspiration pneumonia. Without a compatible history, the most important differential diagnoses would include esophageal stricture, neoplasia, hiatal hernia and gastro-esophageal intussusceptions. Each of these conditions can be differentiated by radiography and/or endoscopy.

The aim of the article

The aim of the article is to present own experiences connected with presence of foreign bodies in the esophagus in dogs and cats.

[©] Maciej Grzegory, Krzysztof Kubiak, Jolanta Spużak, Marcin Jankowski, Józef Nicpoń, Katarzyna Michlik, Igor Maksymovych, 2010

Material and methods

The study presents 3 clinical cases of dogs and cats with foreign bodies in the esophagus referred to the endoscopic laboratory of Department of Internal Disesases with Clinic of Horses, Dogs and Cats, Faculty of Veterinary Medicine , University of Environmental and Life Sciences, for esophagoscopy. The esophagoscopy was performed in total anaesthesia , by using Olympus GIF QX20 pediatric fiberoscop. The animals fasted for 24 hours, before the endoscopic examination.

Results

Case I.

THE MALE DOG, MIXED BREED, 5 YEARS OLD

The history and the clinical examination:

- mechanical injury of the oral cavity, caused by a stick during the walk
- intense discharge of the foamy blood from the oral cavity
- The clinical examination reveald injury of left palatal arch, subcutaneous emphysema and general weakness
- the condition of dog was very poor; for that reason, the endoscopy examination was not performed and the next day the dog died.

The post-mortem examination revealed perforation of the esophagus wall, located 2-3 cm from the larynx, inflammatory and necrotic reaction around the injury, serous, sanguineous fluid in the pleural cavity- about 1 litre. In the abdominal cavity organs did not show any pathological changes. Perforation of the esophagus wall was the cause of death.

Case II.

THE MALE CAT, EUROPEAN BREED, 1 YEAR OLD

The history:

- The cat was referred to the endoscopic laboratory of Department of Internal Disesases with Clinic of Horses, Dogs and Cats, Faculty of Veterinary Medicine , University of Environmental and Life Sciences, to confirm radiological fish hook in esophagus. During removal of this hook, the cat died-because of vagal nerve irritation.

Case III.

THE MALE DOG, WEST HIGHLAND WHITE TERRIER, 5 YEARS OLD The history:

- the dog was referred to the endoscopic laboratory of Department of Internal Disesases with Clinic of Horses, Dogs and Cats, Faculty of Veterinary Medicine, University of Environmental and Life Sciences, due to pharyngitis, for an endoscopic examination of the upper respiratory tract
 - the dog was treated with anti-inflammatory drugs and antibiotics
- the clinical examination revealed: intense hypersalivation, grunting, dyspahagia, false vomiting; temperature, pulse and respiration were within the physiological norms
- during the endoscopic examination of the respiratory tract with a rigid OLYMPUS A5290A endoscope was confirmed pharyngitis

- esophagoscopy also revealed foreign body- a wedged bone and inflammation changes with ulcerations of tunica mucosa in the thoracic part of the esophagus
 - the wedged bone was removed by clamps for removal of foreign bodies

Discussion

Foreign bodies in the esophagus constitute a frequent problem in dogs and cats. Sharp objects and objects which lead to necrosis of the esophagus wall can cause a perforation with leakage to the surrounding tissues, thereby resulting in infection and inflammation (2). The prognosis for most esophageal foreign bodies is generally good, especially if they are removed immediately. A worse prognosis is associated with foreign bodies that are large, have sharp points, or that are retained for a prolonged period of time. Immediate complications include complete obstruction or laceration, whereas late complications include perforation, fistulatio and diverticula or stricture formation (1).

Conclusion/Summary

Above presentations confirm high usefulness of endoscopic examinations in diagnostics and removal of foreign bodies in the esophagus in dogs and cats.

Reference

- 1. Washabau R.J.: "Swallowing disorders" in: Thomas D.A., Simpson J.W., Hall E.J.: "Manual of Canine & Feline Gastroenterology". 1996, BSAVA, Shurdington, p.76 77
- 2.Plumkett S.J.:" Stany nagłe małych zwierząt". 2009, Elsevier Urban Partner, p. 142 144.
- 3.Morgan R.V.: "Handbook of Small Animal Practice". 1997, W. B. Saunders Company, Philadelphia, p. 331

Стаття надійшла до редакції 19.03.2010