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*Short communication*

# Oesophageal foreign bodies in dogs

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## Abstract

The aim of the paper is to present own experience in diagnosis and endoscopic removal of foreign bodies from the oesophagus in dogs. The study was performed on 22 dogs of different breed and sex, aged 7 months to 17 years, with suspicion of a foreign body in the oesophagus. All the dogs were subjected to a radiography of the oesophagus and oesophagoscopy. The most commonly observed clinical signs were regurgitation and swallowing disorders. The best diagnostic method allowing detection of foreign bodies in the oesophagus was esophagoscopy.

**Key words:** oesophagus, foreign body, dog, esophagoscopy

## Introduction

Foreign bodies situated in the oesophagus of dogs are clinical cases which relatively often require fast, sometimes immediate vet's intervention. The longer foreign bodies stay in the oesophagus, the more difficult it is to remove them outside and more frequently serious complications occur including a fatal outcome. Hence, each animal with the signs of sudden choking, vomit reflexes, regurgitation, hypersalivation, dysphagia, odynophagia and cough should be suspected of having a foreign body in the oesophagus (Leib and Sartor 2008, Juvet et al 2010). The aim of the paper is to present own experience in diagnosis and endoscopic removal of foreign bodies from the oesophagus in dogs.

## Materials and Methods

The study was performed on 22 dogs of different breed and sex, aged 7 months to 17 years, with suspi-

cion of a foreign body in the oesophagus. Before oesophagoscopy all the dogs were subjected to a clinical examination, haematological and biochemical blood examination and a radiological examination. The endoscopic examination was carried out after 24-hour-fasting and a 6-hour-break in administration of water, in general anaesthesia. Oesophagoscopy was conducted using a flexible Olympus GIF XQ-20 endoscope. The foreign bodies were removed from the oesophagus using grasping forceps of the Olympus FG-49L-1 "rat's tooth" with "alligator's jaws" type and rigid Olympus A6997 forceps.

## Results and Discussion

Foreign bodies in the oesophagus were most commonly detected in Yorkshire terriers (36.5%) and West Highland White Terriers (22.7%). The dogs with a foreign body in the oesophagus manifested the following clinical signs: regurgitation – 17 cases (the most common clinical sign), loss of appetite

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– 11 cases, reduced appetite – 4 cases, hypersalivation – 13 cases, the body weight loss – 3 cases, vomits – 2 cases, odynophagia – 9 cases, cough – 6 cases, dysphagia – 5 cases, fever – 1, pale mucosa – 3 cases and signs of dehydration – 5 cases. The radiological examination showed foreign bodies in 16 dogs. In 6 dogs the radiological examination was negative. The endoscopic examination of the oesophagus showed foreign bodies in 22 dogs. They included: bones (the most common foreign body), line with trichobezoar, dental chew and toothpick. In 14 cases a foreign body was successfully removed from the oesophagus during endoscopy. Seven dogs were subjected to the surgical procedure. In one case the attempt to remove a foreign body during endoscopy was unsuccessful – the dog died. After the endoscopic removal of foreign bodies the inflammatory changes of the mucosa were observed in 4 dogs, mechanical damage of the oesophageal mucosa and inflammatory changes – in 8 dogs and oesophageal stenosis – in 2 dogs.

In veterinary literature foreign bodies in the oesophagus were most frequently found in terriers and retrievers. In the present study terriers accounted for as many as 63.7% of the dogs with an esophageal foreign body. The breed in which foreign bodies were detected in the oesophagus most frequently were Yorkshire terriers (36.5%). This observation is confirmed by the studies conducted by Rousseau et al. (2007). However, in the studies performed by Kaiser et al. (2003) and Juvet et al. (2010), the predisposed breed was West Highland White Terrier. The conducted research showed that the most common clinical signs observed in the dogs with a foreign body in the oesophagus included regurgitation (77.3%) and swallowing disorders. Similar clinical symptoms were found by other authors (Spielman et al. 1992, Kaiser et al. 2003, Rousseau et al. 2007). The survey radiological examination performed in dogs with an esophageal foreign body gave positive (72.7%) and negative (27.3%) results respectively. A similar radiography results were obtained by Leib and Sartor (2008). In the studies by Spielman et al. (1992), Kaiser et al. (2003) and Juvet et al. (2010) the percentage of positive results of the radiological examination in dogs with a foreign body in the oesophagus was higher and amounted from 96 to 100%. Foreign bodies most frequently diagnosed in the oesophagus are bones. This was confirmed by own observations which showed that bones accounted for over 80% of foreign bodies

in the dog oesophagus. A similar frequency of bones' occurrence in the dogs' oesophagus was confirmed by other authors (Kaiser et al. 2003, Juvet et al. 2010). In own studies endoscopic removal of foreign bodies from the oesophagus proved successful in 63.6% of dogs. In the study by Leib and Sartor (2008) the endoscopic removal of foreign bodies from the oesophagus was successful in 80.6% of dogs and in the study by Juvet et al. (2010) – in 68.2% of dogs. In own studies the most common complication were the inflammatory changes of the oesophagus (over 80%). In other studies oesophagitis was also the most common complication (Rousseau et al. 2007, Juvet et al. 2010). In own studies the mortality rate of dogs after endoscopic removal of foreign bodies from the oesophagus was low and amounted to 4.5%. Similar mortality rates in removal of foreign bodies from the oesophagus were described by Kaiser et al. (2003) and Rousseau et al. (2007) and amounted to 2% and 5%, respectively.

In summary, it is worth noting that diagnosis of foreign bodies in the oesophagus of dogs on the basis of the clinical examination is difficult due to non-specific clinical signs which may indicate many other oesophagus diseases. In the diagnostic procedure the best method is esophagoscopy as it allows for identification of each kind of a foreign body and evaluation of the oesophageal mucosa changes resulting from the presence of a foreign body in the oesophagus. Moreover, the endoscopic technique makes it possible in most cases to remove safely a foreign body from the oesophagus.

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