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SLIDING HIATAL HERNIA IN DOGS

Key words: *sliding hiatal hernia, dogs.*

Introduction

Sliding hiatal hernia is a disorder resulting from a displacement of the abdominal part of the oesophagus and/or a part of the stomach into the thoracic cavity through the oesophageal hiatus of the diaphragm. The disorder may be congenital or acquired. Congenital hernia follows disturbances in the embryonic development. In the literature the predisposition to congenital sliding hiatal hernia is observed in the dogs of shar-pei and chow-chow breeds. Pathogenesis of acquired sliding hiatal hernia has not been fully elucidated yet. It may be a consequence of : increased intra-abdominal pressure, chronic vomiting, the lung obturation disorders and traumas. The clinical signs of sliding hiatal hernia include, among others, vomiting, false vomiting, hypersalivation, frequent swallowing, eructation, *fetor ex ore*, coughing and dyspnea (1-12).

The aim of the study

The aim of the study was to evaluate usefulness of the endoscopic examination in diagnosis of sliding hiatal hernia in dogs.

Materials and methods

The study was conducted on 105 dogs of different breed, size, sex and age with the symptoms of chronic vomiting that were referred to panendoscopy in the Endoscopic Laboratory of the Department of Internal Diseases with the Clinic for Horses, Dogs and Cats. The endoscopic examinations were performed under general anaesthesia, after 24h fasting and a 6h break in administration of water directly before the procedure. The general anaesthesia consisted of premedication which included xylazine in a dose 1-2 mg/kg b.w. with atropine in a dose 0.05 mg/kg b.w., and main anaesthesia which included thiopentale in a dose 5 mg/kg b.w., and next according to the effect. The endoscopic examination was performed using a paediatric Olympus XQ20 fiberscope.

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Results

Based on the conducted research on 105 dogs sliding hiatal hernia was diagnosed in 7 dogs (6.67 %) (Fig.1). The history revealed that the dogs with diagnosed sliding hiatal hernia had suffered from: vomiting, hypersalivation, frequent swallowing, coughing and dyspnea. The endoscopic examination showed a different degree of oesophageal mucosa inflammation, sliding hiatal hernia and gastritis. In 4 dogs the open pyloric sphincter was observed. All the dogs had laryngitis and 5 dogs – tracheitis, accompanied by foamy secretion in its lumen resulting from the chyme reflux into the respiratory tract. The dogs suffering from hernia included 5 French bulldogs (71.43 %), 1 English bulldog (14.29 %) and 1 dog of the Golden Retriever breed (14.29 %) (Fig.2). The diagnosis of sliding hiatal hernia in 5 French bulldogs may indicate the predisposition of this breed to this disease. However, the group is not numerous enough to draw such conclusions. Four dogs in which sliding hiatal hernia was diagnosed were males and 3 dogs – females. The dogs were aged 4 months – 2 years and 5 months (mean age – 10.5 months) (Fig.3). Among them 6 dogs were under 1 year. The young age of the dogs indicates congenital sliding hiatal hernia.

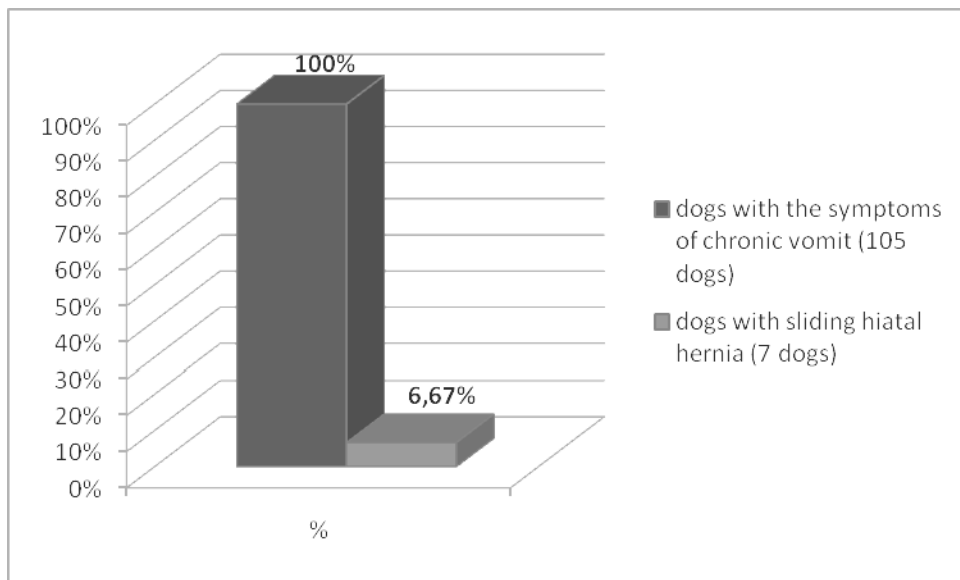


Fig.1 – Prevalence of sliding hiatal hernia in dogs

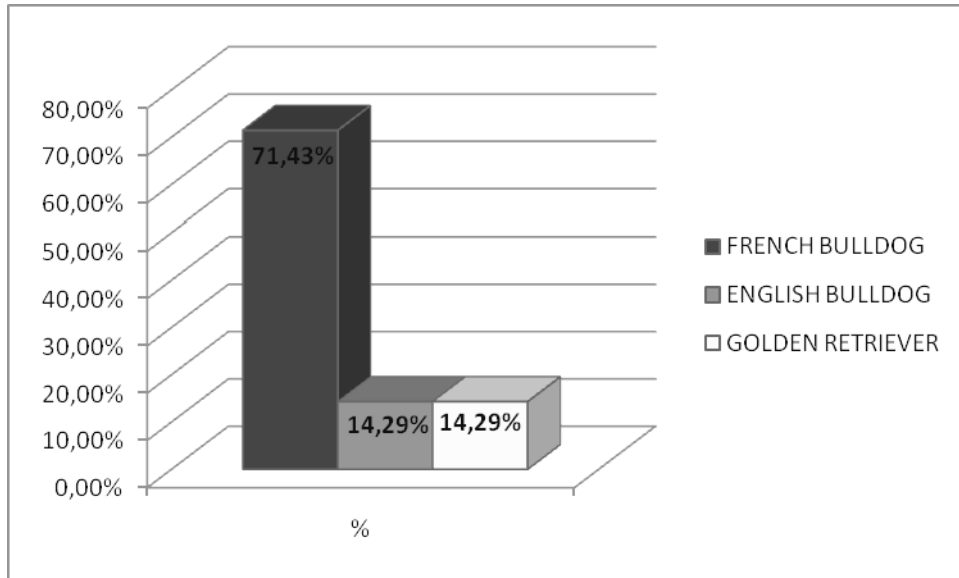


Fig.2 – Breeds of dogs in which sliding hiatal hernia was diagnosed.

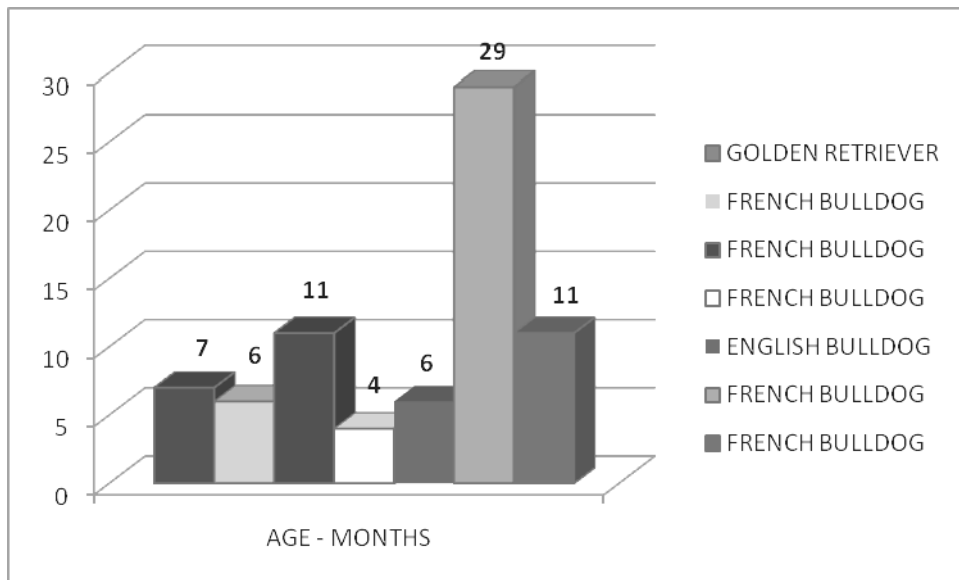


Fig.3 – The age of dogs in which sliding hiatal hernia was diagnosed.

Conclusions

The conducted study showed usefulness of the endoscopic examination in diagnosis of sliding hiatal hernia in dogs. Additionally, the endoscopic examination allows evaluation of the degree of the oesophageal mucosa changes, resulting from the chyme reflux.

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Summary

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