The diagnosis of gastritis and Helicobacter-like organisms infection in endoscopic biopsies of the canine gastric mucosa

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Abstract

The aim of this study was to evaluate the prevalence of gastric Helicobacter-like organisms (GHLO) and gastritis in the gastric mucosa of dogs with gastric disorders. Tissue samples of the gastric mucosa were obtained from 30 dogs with gastrointestinal symptoms (vomiting, abdominal pain or discomfort, loss of appetite) during endoscopy. Histopathological examinations were performed and occurrence of GHLO infection, gastritis and other mucosal changes were estimated. The GHLO infection and gastritis were identified in 63.3 and 36.6% of dogs respectively; other mucosal changes included fibrosis in the lamina propria, degenerative changes of the gastric glands and hyperplasia of the parietal cells. The present study has revealed that microscopically found gastritis is not frequent in dogs examined by endoscopy. GHLO infection can be responsible for some cases of gastritis and hyperplasia of parietal cells in dogs.

Key words: dog, Helicobacter, GHLO, gastritis, endoscopy

Introduction

Endoscopy of the upper gastrointestinal tract has proven to be a valuable diagnostic tool in veterinary medicine. It is useful in differential diagnosis, sometimes may be sufficient to establish the final diagnosis or at least helps to guide further diagnostic testing (Mansel and Willard 2003, Kubiak et al. 2004a, Kubiak et al. 2004b).

A diagnostic endoscopy allows examination to discover abnormalities and to obtain biopsy samples (mostly mucosal) from the most characteristic macroscopic lesions. This procedure is usually recommended in patients with clinical manifestations of oesophageal or gastric disorders. The most common indication for endoscopy is chronic or periodic vomiting, lasting for more than 5 weeks. Other indications include: acute vomiting worsening a patient’s condition, bloody vomiting, no treatment response or the suspicion of a foreign body in the stomach (Kubiak et al. 2004b, Sapierzyński and Galanty 2004).

Gastrointestinal disorders are very common in dogs. Canine gastritis is frequently observed during clinical examination or autopsy, although is rarely reported in the literature (Weeb and Twedt 2003). Our earlier studies indicated that 31% of 94 dogs, euthanized at veterinary clinics, showed histopathological features of gastritis (Sapierzyński and Malicka 2004a). In the vast majority of cases, no clinical gastrointestinal manifestations, including vomiting were noted. In one dog only, vomiting were certainly associated with severe gastritis.