Neoplastic lesions in the nasal cavities of dogs

J. Spużak1, M. Jankowski1, K. Kubiak1, K. Glińska-Suchocka1, M. Grzegory1, A. Hałoń2

1 Department of Internal Diseases with Clinic of Horses, Dogs and Cats, Faculty of Veterinary Medicine, Wrocław University of Environmental and Life Sciences, Pl. Grunwaldzki 47, 50-366 Wrocław, Poland
2 Department of Pathomorphology, Division of Pathomorphology and Clinical Cytology, Faculty of Medicine, Wrocław Medical University, Borowska 213, 50-556 Wrocław, Poland

Abstract

This paper aims at evaluating the frequency of nasal cavity tumors in dogs as well as comparing an endoscopic examination with a histopathological evaluation of the collected biopsy specimens. The study was conducted on 68 dogs. During the endoscopic examination, proliferative lesions were recognized in 20 dogs. During the histopathological examination, neoplastic lesions were confirmed in 95% of the dogs in which proliferative lesions were identified in the endoscopic examination. Adenocarcinoma occurred most frequently in the population under study.

Key words: nasal cavity tumors, rhinoscopy, histopathological examination, dog

Introduction

Nasal cavity tumors occur relatively rarely. They constitute 1 to 2.5% of all neoplasms occurring in dogs. They are most often found in middle-aged and older dogs. Mesocephalic and dolichocephalic dog breeds are predisposed to the occurrence of nasal tumors (Malinowski 2006, Sapierzyński 2010). A medical history, clinical examination, radiological examination, endoscopic examination, computed tomography, magnetic resonance imaging, and histopathological examination are helpful in the diagnostics of these tumours (Willard and Radlinsky 1999, Lefebvre et al. 2005). Clinical symptoms associated with nasal cavity tumors are as follows: unilateral or bilateral rhinorrhea, nose bleeding, sneezing, difficulty with breathing, and nasal area deformation (Knotek et al. 2000).

The aim of the paper was the evaluation of the frequency of nasal cavity tumors that occur in dogs as well as a comparison of the results of the endoscopic examination with the histopathological evaluation of the collected biopsy specimens.

Materials and Methods

The study was carried out on 68 dogs of different breeds, size, sex, and age. The animals were referred to the endoscopy laboratory in order to perform a rhinoscopy. The dogs were qualified for an endoscopic examination based on the following criteria: a complete medical history, full clinical examination, and results of additional examinations. Fasting for 24 hours and excluding water intake six-hours prior to the examination were part of the dietary preparation for rhinoscopy. The rhinoscopy was performed under general anaesthesia. The posterior rhinoscopy was carried out using a fiberscope, whereas the anterior...