Endoscopy and histopathology in the examination of the nasal cavity in dogs

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Abstract

Nasal diseases of chronic nature are a common clinical complaint in canine practice. However, precise diagnosis in these cases is often difficult and requires the use of additional diagnostic methods. The aim of this study was to estimate the occurrence of diseases of the upper respiratory tracts in dogs, and to evaluate the usefulness of endoscopy in the diagnostic process as a method of obtaining a final diagnosis. In the group of dogs in which rhinoscopy was performed, the most common final diagnoses were nonspecific chronic rhinitis, followed by neoplasms and infectious rhinitis. It can be concluded that rhinoscopy should be considered mainly as a preliminary method of inspection of the nasal cavity, helpful in obtaining the most representative tissue specimen/specimens for histopathology. In some cases, especially foreign objects and congenital abnormalities rhinoscopy can give the possibility of obtaining a final diagnosis. However, even in these situations and also when any macroscopic lesion is found during endoscopy, microscopic examination of the mucosa specimen should be performed.

Key words: endoscopy, rhinoscopy, dog, histopathology

Introduction

Nasal diseases of chronic nature are a common clinical complaint in canine practice. However, precise diagnosis in these cases is often difficult and requires the use of additional diagnostic methods. Examination of the upper respiratory tract, as well as the trachea and bronchus usually requires a combination of several diagnostic techniques including rhinoscopy, bacteriology, mycology, cytology, histopathology and imaging techniques (radiography, computed tomography and others; Clercx et al. 1996, Willard 1999, Lefebvre et al. 2005, Petite and Dennis 2006, Meler et al. 2008). However, even where these additional examinations are performed a definitive diagnosis can be difficult or impossible to establish in some cases (Bisset et al. 2007, Meler et al. 2008, Miles et al. 2008). The usefulness of endoscopic examination in diseases of the nasal cavity and upper respiratory tract in small animals is unarguable, especially in cases of nasal neoplasms, foreign objects, anatomical abnormalities and in some infections (Willard and Radlinsky 1999, Sapikowski 2006). Endoscopy allows direct inspection of the lumen and mucosal surfaces, to see abnormal growths and foreign objects; additionally, fluids as well tissue samples can be obtained during endoscopy from particular interesting macroscopic lesions. However, endoscopic diagnosis can be final...