RESUMO SIMPLES - OUTRAS ÁREAS TEMÁTICAS

PRIMARY TRACHEAL CARCINOMA IN A CAT: CASE REPORT

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Primary tracheal neoplasms are rare in domestic animals. In cats, the most frequently reported types include lymphomas and adenocarcinomas. Tracheal carcinoma is a malignant neoplasm characterized by rapid growth and generally infiltrative behavior, promoting invasion of adjacent structures. Additionally, it presents an unfavorable prognosis due to its metastatic dissemination potential. Clinical manifestations predominantly involve respiratory signs such as non-productive cough, dyspnea, and exercise intolerance. Occasionally, alterations associated with swallowing may be observed. Diagnosis is based on radiographic and tomographic findings of the cervical and thoracic regions,

clinical history, and histopathological evaluation of the lesion. When necessary, immunohistochemistry may be used for diagnostic confirmation. Considering the low occurrence and the scarcity of reports of this disease in the species, the present report describes the case of a 15-year-old, mixed-breed, female cat treated at the Cardiology and Pulmonology Service of the Veterinary Hospital of the Federal Rural University of Rio de Janeiro (HV-UFRRJ). The animal presented severe dyspnea, cough, gagging, and a history of chronic rhinotracheitis. According to the owner, the cat had been treated with bronchodilators prescribed at an external service due to suspected feline asthma; however, no clinical improvement was observed. A previous radiographic examination yielded a presumptive diagnosis of tracheal collapse and degenerative disease of the tracheal cartilage rings. Although this condition is widely described in dogs, reports in cats remain scarce in the literature. A new thoracic radiographic examination was performed at the Diagnostic Imaging Service of HV-UFRRJ, revealing in the mid-third of the trachea a radiolucent area measuring 2 cm in diameter, occupying nearly the entire tracheal lumen, accompanied by diffuse wall thickening and pulmonary edema. Due to the severity and progression of respiratory distress, euthanasia was elected by the owner. The animal was then referred to the Pathology Sector of UFRRJ, where necropsy and histopathological examination were performed. Necropsy revealed, in the mid-third of the trachea, an exophytic, irregular, firm, whitish mass measuring 2.0 cm × 2.0 cm, which encircled the organ and compressed the esophagus, explaining the respiratory distress and episodes of gagging and dysphagia observed clinically. The tracheal mucosa appeared slightly thickened, covered by mucus and clear fluid compatible with edema. The mass was collected and immediately fixed in 10% buffered formalin for further histopathological processing. Histopathology revealed that the neoplasm replaced the normal tracheal architecture and was organized into trabeculae with nests of moderately differentiated neoplastic epithelial cells, supported by abundant fibrous connective tissue. Foci of dyskeratosis, occasional keratin lamella formation, and mild lymphoplasmacytic infiltration were also identified. Due to the low epithelial differentiation of the neoplastic cells, immunohistochemistry using a pancytokeratin antibody was performed, which demonstrated positive labeling, confirming the epithelial origin of the neoplasm. Retrospective studies report that primary tracheal masses in domestic cats are diagnosed at an average age of 10.7 years, with dyspnea, gagging, and coughing being the most frequently observed clinical signs, which corroborates the findings described here. Given the scarcity of reports and the diagnostic

challenges, since tracheal tumors may be mistaken for other upper respiratory tract diseases, this case contributes to expanding the discussion regarding primary tracheal neoplasms in cats and reinforces the need for comprehensive diagnostic approaches, particularly in geriatric patients whose clinical course is inconsistent with common respiratory diseases of the species.

Palavras-chave: cat; dyspnea; histopathology; neoplasia.