NASAL MASS AND NEOPLASIA: A RETROSPECTIVE CLINICAL STUDY IN 37 CATS UNDERGOING RHINOSCOPY

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RESUMEN CORTO/RESUME

A population of 37 cats with nasal disease underwent rhinoscopy. It was analyzed the presence of mass and its relationship with neoplasia, type of mass and neoplasm observed, mean age of affected animals, aspects related to the endoscopic visualization, affection of choanae, retrograde visualization and diagnostic sensitivity and specificity of the endoscopic view with respect to neoplasia. After statistical analysis, it was observed that the nasal mass was in most cases of neoplastic nature, being the nasal carcinoma, the most represented neoplasm followed by lymphoma. The choana is the most frequent situation being observed by retrograde endoscopic visualization and presenting the rhinoscopy as a high sensitivity and specificity tool respect to the diagnosis of neoplasia.

OBJETIVOS DEL TRABAJO / OBJECTIVES OF THE STUDY

Rhinoscopy is an useful tool used alone or along with other diagnostic imaging media like computerized tomography when nasal disease is presented. The objective of this study is to describe endoscopic findings in a case series of cats with symptoms of nasal disease by assessing the presence of mass, presence and type of neoplasia, age of the affected animals, area of visualization, affected side, retrograde visualization, diagnostic sensitivity and specificity of the endoscopic image related to neoplasia in dogs with nasal disease.

MATERIAL Y MÉTODO / MATERIAL AND METHODS

A population of 37 cats with some symptom of nasal disease. All the animals underwent rostral and caudal rhinoscopy. Following variables were analyzed: presence of mass, presence of neoplasia, age, intra-nasal visualization of the mass (respiratory mucosa, olfactory mucosa, choana, complete nasal cavity), affected side (unilateral right / left, bilateral), retrograde visualization of mass, diagnostic sensitivity (true positives / neoplasia) and specificity (true negatives / no neoplasia). The distribution of the data was analyzed with the K-S test; Mann-Whitney, Kruskal-Wallis to compare means and X² for qualitative variables. The SPSS program was used with a significance level of P < 0.05.

RESULTADOS / RESULTS

Mass was observed in 18 cats (48.6 %) and neoplasia in 16 cats (43.2 %). Malignant neoplasm was observed in 13 masses (72.2 %). Benign mass, 1 (5.6 %) had a histological diagnosis of benign proliferative rhinitis due to oronasal fistula; 1 (5.6 %) as active chronic rhinitis of fungal etiology; 1 (5.6 %) as inflammatory polyp and finally 2 (11.1 %) had no histological diagnosis. When compared with other studies, neoplasia represented 46 % of nasal disease in cats being lymphoma and carcinoma the most common neoplasia observed.

Malignant neoplastic mass with a highest representation was carcinoma in 8 masses (61.5 %), followed by lymphoma (3 masses, 23.1 %) and sarcoma (2 masses, 15.4 %). These results differed from other study in which lymphoma was the most common malignant neoplasia instead of carcinoma. Malignancy not associated with mass was observed in 3 cases (18.8% of the neoplasms, 1 being lymphoma and 2 sarcomas) showing nodulations and thickening of the nasal mucosa as lesion pattern observed respectively.
Mean age in cats with mass and neoplasia were 9.1 ± 4.6 years (range, 3.0 to 17.0) and 9.3 ± 4.8 years (range, 3.0 to 17) respectively. The neoplasm was observed in more females (45.0 %) than males (40.0 %) but no significant differences were observed between sexes (P = 0.74). A study described the onset of lymphoma in elderly cats (10 years old) as we observed as well.

Mass was visualized on the respiratory mucosa in 3 cats (16.7 %), 2 cats (11.1 %) over the olfactory mucosa, 7 cats (38.9 %) in the choana and 6 cats (33.3 %) over the entire cavity, without significant differences between locations (P = 0.166). Mass was presented in 6 cases (33.0 %) as unilateral-right, 6 as unilateral-left (33.3 %) and 4 as bilateral (22.0 %) without significant differences between the affected sides (P = 1.00). It is remarkable the necessity of exploring nasopharyngeal cavity and choanae given that the high presence of pathologic changes in this site. In our study, mass was observed from nasopharynx in 14 cats (77.8 %) and all of them showed some degree of nasopharyngeal obstruction.

The sensitivity and specificity of the endoscopic view with suspected neoplasia respect to neoplasia were 81.2 % and 84.2 % respectively. We didn’t find any previous study in cats to establish a comparison on either, rhinoscopy sensitivity or specificity.

CONCLUSIONES / CONCLUSIONS

1. Nasal mass is a frequent diagnosis in cats undergoing rhinoscopy being in most cases of neoplastic nature, although sometimes is associated with proliferative and chronic active rhinitis or inflammatory polyp.

2. Nasal carcinoma is a neoplasm frequently associated with nasal mass, followed by lymphoma and sarcoma, the latter also being observed in nodular patterns

3. Both, mass and nasal neoplasia occur more frequently in elderly cats regardless of gender

4. Retrograde endoscopic visualization of the nasal mass on the choanae is usual, followed by rostral visualization over the respiratory mucosa and finally on the olfactory, independently of the affected side

5. Rhinoscopy presents a high sensitivity and specificity respect to the nasal neoplasia in the cat

BIBLIOGRAFÍA / BIBLIOGRAPHY


