Nasal Tumors-Are They Common?  

DID YOU KNOW?

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Although representing only 2% or less of all canine and feline cancer, nasal neoplasia is a common cause of upper airway signs in our middle age and older pets. While seen in all breeds, the dolichocephalic dog breeds are reported to be more frequently affected. The mean age in dogs and cats diagnosed with nasal tumors is 9-10 and 8-10 years old respectively. Typical clinical signs include sneezing or reverse sneezing, persistent nasal discharge (unresponsive to routine antibiotic therapy for instance), epistaxis (any amount of blood is concerning), airflow obstruction (unilateral or bilateral – particularly “fitful sleeping”), facial swelling, regional lymphadenopathy, pain opening the mouth and possible neurological signs if there is (uncommonly) CNS invasion. Locally invasive these tumors do not metastasize readily but rather cause local signs as outlined above. Importantly it is these local signs which are commonly the eventual cause for euthanasia (as opposed to metastasis, pain etc.).

A very common history that I hear is the onset of a “new” respiratory sound while sleeping. Typically these tumors arise unilaterally from the caudal nasal cavity and extend into airway openings (anteriorly between turbinates or posteriorly into the nasopharynx). When only one side is obstructed the animal can sleep comfortably and quietly (when their mouth is closed). Once there is extension through the nasal septum (involving both sides) or growth in the nasopharynx that effectively blocks both choanae then sleeping at night becomes difficult with increased effort and new noises suddenly reported by the owner. There is also what I refer to as “fitful sleeping” – interrupted sleep due to their inability to breathe when they close their mouth. Hypoxia ensues, they will wake up, get up, shake, open mouth breathe, and repeat this process over and over (typically waking the owners every night!).

The diagnosis should be suspected based on the above signs. Skull radiographs may be suggestive, a CT is better for localization (and planning radiation therapy) but a biopsy is required for tissue confirmation and for making a decision on treatment. Anterior and posterior (flexible scope over the soft palate) rhinoscopy is the definitive way to obtain these biopsies. An abstract at the 2008 ACVIM meeting reported the technique of nasal hydropulsion. This procedure not only often obtains very large biopsy samples but frequently helps to debulk nasal tumors and allows the animal to breathe easily for a period of time while proceeding with more definitive therapy. Differential for these clinical signs include FB, fungal rhinitis, tooth root abscess, granuloma or benign polyp (more rare).

Radiation therapy is the treatment of choice for nasal tumors. Unfortunately many factors have limited this form of treatment including availability (only up in Portland or down in Davis, CA currently), time away from home (3-4 weeks), cost (~ $4000-5500) and immediate side effects (dermal and oral burns). Survival times following radiation therapy varies depending on tumor type but has been reported to range between 9-23 months. One recent study using chemotherapy showed objective (measurable) response in 6 of 8 dogs but all dogs had clinical improvement following the start of chemotherapy. This form of chemotherapy is routinely done at SOVSC (typically on a once every 3 week basis). Finally, metronomic (or anti-angiogenic) chemotherapy (oral medication done at home) can be used in attempt to slow the progression of tumor growth and in some cases has led to tumor regression for a period of time.

If we can help you with your cases don’t hesitate to call 24/7!!

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