



## Nasal Tumors

**Introduction:** Tumors of the nasal cavity are relatively uncommon in small animals, being observed more frequently in dogs than in cats. Nasal tumors are most commonly of epithelial origins (adenocarcinoma, squamous cell carcinoma, solid carcinoma), but chondrosarcoma (dogs) and lymphoma (cats) are also relatively common. Breeds most commonly affected are the retrievers, German Shepherds, Collies, and Shetland sheepdog. In dogs, approximately 80% of nasal tumors are malignant.

**Clinical Signs:** The most common clinical signs are epistaxis (bleeding from the nose) and chronic nasal discharge. Discharge typically begins unilateral, but becomes bilateral later on in the disease process. Sneezing and respiratory stertor are also commonly seen with nasal tumors. Occasionally, facial and oral deformities may be seen as the tumor increases in size.

**Diagnosis:** Nasal tumors are typically diagnosed based on history, clinical signs and eliminating other causes of nasal discharge. Nasal radiographs are sometimes useful for diagnosing nasal tumors, but advanced imaging with a CT or MRI is usually required. A definitive diagnosis is only obtained with a biopsy of the lesion.

Staging with blood work, three-view thoracic radiographs, and abdominal ultrasound is recommended before beginning treatment for nasal tumors. Advanced sectional imaging (CT-scan or MRI) is strongly recommended to determine the extent of the disease, and organize a therapeutic plan.

**Treatment:** Full-course radiation therapy is the treatment of choice. Median survival time for nasal adenocarcinomas is approximately 12-18 months and for squamous cell carcinomas is approximately 8-10 months with treatment. Surgery is generally not recommended since it may increase the morbidity without significant increase in survival; however in select cases based on the histology and extent of disease, a ventral rhinotomy may be recommended. The benefit of adjuvant systemic chemotherapy is questionable.

**Prognosis:** Metastasis is rarely reported and usually occurs late in the disease process. Metastasis is typically to the regional lymph nodes, lungs and brain. Caudal extension to the brain and associated neurologic signs generally predict a poorer prognosis. Nasal tumors left untreated tend to carry a 3-5 month prognosis.