Canine Nasal Carcinoma

What is canine nasal carcinoma?
Canine nasal carcinomas are tumors that arise from the normal tissues of the inner nose. They are locally aggressive tumors that invade and involve the surrounding tissues including bone. They can occasionally move to the local lymph nodes and lungs, but the local disease is much more of a concern.

What are the clinical signs of canine nasal carcinoma?
Dogs with a nasal tumor often develop chronic, one-sided nasal discharge that is yellow or green in color. They may develop nosebleeds that can also be one-sided. Sneezing and deformation of the nose or one eye are possible.

How is canine nasal carcinoma diagnosed?
A biopsy and a CT scan of the nose and head are required to diagnose a nasal tumor. Sometimes a definitive diagnosis will not be obtained on the first try, and additional biopsies will be necessary. In order to confirm that disease is confined to the nose, small samples of the lymph nodes under the chin and x-rays of the chest are recommended prior to starting any treatment.

How is canine nasal carcinoma treated?
Since this type of tumor tends to be more locally aggressive, we focus our treatment on local control with surgery or radiation therapy. Surgery for nasal tumors has been described but comes with a high complication rate and does not result in significant improvement of disease control. Instead, radiation therapy is the treatment of choice. Definitive radiation therapy may be used to attempt to eliminate as much of the tumor as possible. There are two general schemes of radiation that can be employed, depending on the tumor itself and the radiation therapy unit being used. Regardless of the exact type of radiation, these treatments are given once a day for several days to weeks, and anesthesia is required for each treatment (not because the treatment is painful, but because the patient cannot move while the treatment is being given).

Another type of therapy, palliative radiation, is an option to give fewer treatments of radiation with the intention of reducing inflammation, minimizing further growth of the tumor, and possibly killing enough of the cancer cells to cause the tumor to shrink minimally in size. This approach is generally well-tolerated with fewer side effects. Most patients improve with palliative radiation therapy and have a delay in clinical progression of their disease of 6-12 months.

Chemotherapy (injectable or oral) has been reported for treatment of nasal carcinoma but information regarding its efficacy is limited. This may be an option for continued treatment following radiation therapy or if radiation therapy is declined.

What is the prognosis for canine nasal carcinoma?
With definitive radiation therapy, life expectancy is roughly 12 months.