Squamous Cell Carcinoma in Cats

Comprehensive Cancer Care Service

Ryan Veterinary Hospital of the University of Pennsylvania

Squamous cell carcinoma (SCC) is a malignant cancer seen in a variety of locations in cats, including sparsely-haired areas of the skin (particularly the eyelids, nasal planum, and ears), as well as other locations within the body, such as the tonsils, under or on the tongue, mouth, esophagus, or lungs. Most cats with SCC are middle-aged to older, though this disease can affect cats of any age. White cats or cats with lightly pigmented skin, and those with increased sun exposure are at increased risk of developing SCC of the skin. There is increased risk for SCC of the tongue and mouth with the use of flea collars, and in smoking households. Tumors on the skin, eyelid, or nose have a variable appearance, but may appear as a shallow or deep sore (ulceration), a raised, reddened area, or a cauliflower-like growth. Symptoms are related to the location of the tumor, and can include rubbing of the face, discharge or bleeding from the area of the tumor, licking of the tumor, swelling, pain, nose bleeds, difficulty eating or swallowing, dropping food from the mouth, decreased grooming, bloody saliva, halitosis (bad breath), sneezing, or coughing.

Diagnosis/Initial Evaluation

A thorough evaluation of a cat suspected of having SCC involves obtaining an aspirate (needle sample) or biopsy of the affected tissues. Once a diagnosis is made, further diagnostics are performed to assess overall health and ability of the patient to handle cancer treatment (including bloodwork and urine sampling), as well as to determine the extent of tumor within the body and examine for cancer spread (typically x-rays of the chest and needle aspiration of regional lymph nodes). Metastases, when they occur, typically arise in regional lymph nodes and, more distantly, within the lungs.

Treatment and Prognosis

Surgical removal of the tumor is the treatment of choice for SCC in cats. Surgery is ideally attempted early in the course of the disease to ensure complete excision. Advanced imaging such as CT or MRI may be recommended to better determine tumor extent and aid in surgical planning. Unfortunately, in patients with large tumors, or with tumors in a difficult location such the oral cavity, surgery is often not possible.

Other treatment modalities that may be used in addition to or instead of surgery include photodynamic therapy (sensitization of the tumor to light, promoting cell kill), radiation therapy (radiation beam directed at the tumor), or chemotherapy. Specific treatment recommendations for each individual patient will depend on a multitude of factors, including tumor location and the
presence of comorbidities (other illnesses or health conditions). The majority of these tumors are not surgical; therefore therapy is largely palliative in nature, with the intention of minimizing pain and controlling secondary infection of the tumor site.

**Prognosis:** The prognosis for SCC in cats depends on the tumor location, biological behavior/aggressiveness of the tumor (including whether or not the tumor has spread), and whether or not the tumor can be completely removed with surgery. Oral tumors, in general, have a poor prognosis; however, cats with cutaneous tumors may have good long term prognosis if detected and treated early.

*November 2017*