**ORAL SQUAMOUS CELL CARCINOMA IN CATS**

Squamous cell carcinoma is a cancer that occurs in the mouth of middle-aged and older cats. This cancer can occur underneath the tongue or along the gums, and may be caused by grooming potential cancer-causing substances off the fur.

No prevention for squamous cell carcinoma in the mouth is currently known. Regular dental examination and cleaning may detect early tumors, and early treatment is more successful.

**DIAGNOSIS**

Common signs of squamous cell carcinoma in cats include difficulty eating, interest in food but refusal to eat, drooling, and odor from the mouth. Early cancer may appear as a tooth infection or inflamed gum tissue. A sample of the abnormal tissue must be examined under a microscope to diagnose squamous cell carcinoma. During treatment, blood tests help us monitor for side effects from therapy. Blood tests cannot diagnose squamous cell carcinoma.

**STAGING**

Staging includes a series of tests to determine how far cancer has spread in a patient. Radiographs (x-rays) of the mouth help determine whether the tumor is invading into nearby bone. For some patients, a CT scan or MRI is necessary for more detailed information. Cats require anesthesia to allow thorough examination of the mouth and to prevent movement during radiographs or other images of the mouth.

In addition to learning how invasive a tumor may be, other areas of the body are examined for new lesions in other organ systems (metastasis). Small samples of lymph nodes in the neck area can be taken with a needle. Radiographs of the chest can detect colonies in the lungs.

**TREATMENT**

Squamous cell carcinoma is usually not curable unless the cancer is very small, but treatment can reduce the severity of clinical signs and add quality time to your cat’s life.

**Surgery** is the most effective form of therapy for small tumors. Unfortunately, most cancers that occur in the mouth are not detected until they become too large for successful removal. Squamous cell carcinoma is very invasive, and microscopic clusters of the cancer are often left behind during surgery. The clusters begin to grow and the cancer causes further erosion and discomfort in the mouth.
**Radiation therapy** exposes the cancer cells to a lethal dose of energy. Radiation therapy is most effective on small, microscopic amounts of cancer within a limited region in the patient. Surgery is used to remove the visible portion of the cancer, and radiation therapy begins after healing. Radiation therapy can also be used as a sole modality for treatment. Radiation therapy is given in 14 small doses (called *fractions*) over a 1-3 week period. When a tumor is too extensive for surgical removal, radiation can be given in 3-5 treatments to control pain. Each treatment requires that your cat remain completely still for 10-20 minutes, so a short-acting general anesthetic is given for each treatment. Side effects include ulceration of the moist tissue of the mouth can occur (called *mucositis*). Oral rinses, soft foods, and occasionally topical numbing agents can reduce discomfort.

**Chemotherapy** is the use of medications to interrupt the growth of cancer cells. Chemotherapy is unlikely to eliminate the entire cancer, but it may reduce the size and discomfort of the cancer or simply slow its growth. You may be familiar with the side effects of chemotherapy in people. Fortunately, cats rarely experience the severe side effects seen in people. For instance, cats do not lose hair from chemotherapy, although their long whiskers may be lost.

A combination of treatments may be the best choice for your cat. Treatments range in cost, effectiveness, frequency of visits and side effects. As oncologists, we will help you decide which therapy is the best start for your cat.

**Supportive Care:** *Our philosophy is that cancer patients should feel better, not worse, from their therapy.* Anti-inflammatory medication such as Piroxicam may reduce pain and swelling from the tumor. Research suggests that Piroxicam may even help a patient’s immune system fight the cancer cells.

A feeding tube can be placed for home care in cats that require more nutrition than they can comfortably consume due to the tumor. Feeding tubes are easy to use and very well-tolerated by our patients. They are not meant to serve as life support, but they can improve the quality of life for cats that feel good but have difficulty eating.