

# Oral Squamous Cell Carcinoma in Cats

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## BASIC INFORMATION

### Description

Squamous cell carcinoma (SCC) is a form of malignant cancer that arises from cells in the outer layer of the skin and gums. An oral SCC is diagnosed when this cancer is found in the mouth. Oral SCC is the most common form of oral cancer in cats and is a very serious disease. Early, aggressive treatment is necessary to provide the best chance for good control of clinical signs and good quality of life.

### Causes

No direct cause of oral SCC has been identified in cats. Exposure to cigarette smoke, canned fish, and flea collars are suspected to increase the risk of oral SCC in cats, but none of these is a proven cause. Exposure to sunlight, particularly in cats that lack protective pigment in white skin or pink areas on the gums and lips, increases the risk of development of oral SCC in these light-colored tissues. Although the ears are more commonly affected by exposure to sunlight, lesions that arise on the lips can extend into the mouth. Chronic inflammation from periodontal disease and eosinophilic ulcers may contribute in some cases.

### Clinical Signs

Oral SCCs are aggressive, rapidly growing lesions that tend to form ulcers. The most common clinical signs are bleeding from the mouth, drooling, apparent pain when chewing or swallowing, and loss of appetite. The cancer is usually easy to see when it develops on the gum line or adjacent to the teeth. In some cats, SCC affects the tongue or the deeper tissues in the back of the mouth. In these cases, deep sedation or general anesthesia may be needed to allow adequate examination of the whole mouth.

### Diagnostic Tests

It is very important to distinguish oral SCC from other, similar looking lesions in the mouth, such as severe inflammation and other forms of cancer that have different treatments and outcomes. Depending on the location and size of the lesion in the mouth, your veterinarian may recommend fine-needle aspiration (extracting cells with a needle), impression smears, or surface scrapings to obtain cells for examination under the microscope (cytology) or removal of a portion of the mass (biopsy) for histopathology. These tumors can invade deeper tissues and can be aggressive, so surgery to obtain a biopsy specimen must be carefully planned to avoid problems that might complicate future surgical treatment.

Laboratory tests, x-rays of the chest, and an abdominal ultrasound are often recommended to search for spread (metastasis) of the tumor. The process of assessing the amount of cancerous tissue present in the body is called *staging the cancer*. In some cases, x-ray studies, computed tomography (CT scan), or magnetic resonance imaging (MRI) of the jaw is done to establish the extent of tumor growth within the mouth. Your veterinarian may recommend referral to a veterinary oncologist (cancer specialist) for staging and treatment planning.

## TREATMENT AND FOLLOW-UP

### Treatment Options

Treatment options for oral SCC in cats are limited. The best option for prolonging a good quality life is well-planned, aggressive surgery to remove the cancer. Surgery may require removal of teeth, a portion of the jaw (mandibulectomy), or a section of cheek bone (maxillectomy). Because radical surgery is often needed, your cat may be referred to a veterinary surgery specialist for the procedure.

Removal of just the mass itself may have little effect on survival time, because these cancers recur very rapidly if any cells are left behind. Following surgery, local radiation therapy, chemotherapy, or other treatments may be recommended. In some cats, palliative therapy (treatment aimed at keeping the cat comfortable) may be tried, with medications for pain and insertion of a feeding tube.

### Follow-up Care

The schedule for follow-up visits varies depending on the treatment method used. Following oral surgery, soft foods are fed until healing of the site is complete. A feeding tube may also be inserted into the stomach, to allow the mouth time to heal. Antibiotics may be given for any secondary infections, and an Elizabethan collar may be applied to prevent self-trauma. Laboratory tests and chest x-rays may be repeated periodically to monitor for spread of the disease (metastasis) and for side effects from chemotherapy.

### Prognosis

Oral SCC is an aggressive disease that severely impacts the cat's health and quality of life. Very few cats survive longer than 1 year after diagnosis, regardless of the treatment they receive. Cats that receive no therapy usually die or are euthanized within 6 weeks of the diagnosis.