

ORAL TUMOR

Description

**What is an oral tumor?**

VCA Animal Hospital - Overview

**What types of cancer can a dog have in their mouth?**

First Vet

**What is an oral tumor? (VCA Animal Hospital - Overview)**

An **oral tumor** is an abnormal growth and unregulated replication of cells that occur within the mouth.

- A dog’s mouth, similar to our own, is made up of several different cell types; for example, there are epithelial (or skin) cells, bone cells, fibrous cells, and others all of which can become cancerous.
- Some tumors may grow slowly and do not typically spread, meaning they are **benign**, whereas others are aggressive and spread elsewhere (**malignant tumors**). (VCA Animal Hospital - Overview)

**What types of cancer can a dog have in their mouth? (First Vet)**

The most common types of oral cancer in dogs are:

- Melanoma
- Squamous cell carcinoma
- Oral fibrosarcoma

**Oral Melanoma in Dogs**

Melanoma is a tumor of melanocytes, which are pigment-producing cells of the body.

- Oral melanoma has been considered an extremely malignant tumor with a high degree of local invasiveness and high metastatic ability.
- Median survival times for dogs with oral melanoma treated with surgery are approximately 17 to 18, 5 to 6, and 3 months with stage I, II, and III diseases, respectively.
- The tumors can be pigmented (darkly colored) or non-pigmented (pink like gum tissue). They may appear nodular or cauliflower-like.
  - These tumors are often seen as swellings on the gums around the dog’s teeth or on the soft or hard palate.
  - Melanomas often form ulcers that bleed.
  - Secondary bacterial infection is a common complication.
  - This type of tumor may appear small but they usually extend deeper in the oral tissues and invade the surrounding bone.

**Oral Squamous Cell Carcinomas in Dogs**

An oral squamous cell carcinoma (SCC) is a malignant tumor affecting the cells that line the throat and mouth, including the tonsils and gum line.

- It’s the most commonly reported mouth tumor in cats, and the second most common in dogs. Oral SCC in both cats and dogs is locally aggressive, which means it will invade tissues close to the tumor.
- **Bowen’s disease** or **Bowenoid carcinoma** (multicentric carcinoma) is a type of SCC in which the tumors are confined to the surface of the skin and mouth. This type, however, is rare in cats and dogs.
- The cause of oral SCC has not been identified or fully established, but most experts believe it’s a complex combination of several factors - genetic, environmental, and hereditary.
- The tumors appear nodular or cauliflower-like and may be pink or discolored.
  - Some tumors break open and bleed.
  - Although they may appear small, these tumors usually extend deeper into the mouth tissues and may invade the underlying bone.

	<p><b>Oral Fibrosarcoma in Dogs</b></p> <p>Oral fibrosarcoma's originate from the fibrous connective tissues of the mouth.</p> <ul style="list-style-type: none"> <li>• These are malignant, rapidly growing tumors. Recurrence is very high after surgery, and metastasis is very common.</li> <li>• The tumors may appear as swollen areas within the mouth. They frequently ulcerate and become infected.</li> <li>• Surgery to remove the tumor is the standard treatment of choice for fibrosarcoma's. If adjacent lymph nodes are affected, they are also removed during surgery. <i>(First Vet)</i></li> </ul>
<p>Breeds at Risk</p> <p><b>Breeds</b> <i>First Vet</i></p>	<p><b>Breeds</b> <i>(First Vet)</i></p> <p>Although the condition can affect any breed of dog, some breeds seem to be more predisposed to the condition, including:</p> <ul style="list-style-type: none"> <li>• Boxer</li> <li>• Chow Chow</li> <li>• Cocker Spaniel</li> <li>• Dachshund</li> <li>• German Shepherd</li> <li>• German Shorthaired Pointer</li> <li>• Golden Retriever</li> <li>• Gordon Setter</li> <li>• Poodle, Miniature</li> <li>• Poodle, Standard</li> <li>• Scottish Terrier</li> <li>• Weimaraner <i>(First Vet)</i></li> </ul> <p>Other:</p> <ul style="list-style-type: none"> <li>• Akita</li> <li>• Collie</li> <li>• Doberman Pinscher</li> <li>• Irish Setter</li> <li>• Labrador Retriever</li> <li>• Rottweiler</li> <li>• Schnauzer, Giant</li> <li>• Scottish Deerhound</li> <li>• Shetland Sheepdog</li> </ul>
<p>Causes</p> <p><b>What causes these types of tumors?</b> <i>(VCA Animal Hospital – Squamous and Melanoma)</i></p>	<p><b>What causes these types of tumors?</b> <i>(VCA Animal Hospital – Squamous and Melanoma)</i></p> <p>The reason why a particular dog develops this, or any tumor, is not straightforward.</p> <ul style="list-style-type: none"> <li>• Very few tumors and cancers have a single known cause. Most seem to be caused by a complex mix of risk factors, some environmental and some genetic or hereditary.</li> <li>• Male dogs appear to be twice as likely to develop oral cancer than female dogs.</li> <li>• In <b>cats</b>, exposure to smoke, as well as the use of flea collars have been identified as significant risk factors for the development of squamous cell carcinoma.</li> <li>• In <b>dogs</b>, no such correlation has been made, but may be possible. UV exposure has also been proposed as a risk factor in the development of squamous cell carcinoma of the skin covering the nostrils.</li> <li>• Recent studies have shown that exposure to papilloma-like viruses may contribute to the development of multicentric SCC in the mouth. <i>(VCA Animal Hospital – Squamous and Melanoma)</i></li> </ul>

<p>Symptoms</p> <p><b>Symptoms and Types of Oral Cancer in Dogs</b> <i>PetMD by Chewy</i></p> <p><b>What are the clinical signs of squamous cell carcinomas?</b> <i>VCA Animal Hospital – Squamous</i></p> <p><b>What are the clinical signs of melanoma?</b> <i>VCA Animal Hospital – Melanomas</i></p>	<p><b>Symptoms and Types of Oral Cancer in Dogs</b> (<i>PetMD by Chewy</i>)</p> <p>The most common types of oral cancers in dogs are <a href="#">melanoma</a>, <a href="#">squamous cell carcinoma</a> and <a href="#">fibrosarcoma</a>.</p> <p>They all produce similar symptoms, which generally include some combination of the following:</p> <ul style="list-style-type: none"> <li>• Excessive drooling</li> <li>• Bad breath (halitosis)</li> <li>• Difficulty chewing (dysphagia) or drinking</li> <li>• Blood coming from the mouth</li> <li>• Oral pain</li> <li>• Weight loss</li> <li>• Loose teeth</li> <li>• Visible mass in the mouth</li> <li>• Enlarged lymph nodes in the neck (occasionally)</li> <li>• Swollen or deformed areas on the face (<i>PetMD by Chewy</i>)</li> </ul> <p><b>What are the clinical signs of squamous cell carcinomas?</b> (<i>VCA Animal Hospital – Squamous</i>)</p> <p>Lesions may appear as diffusely thickened, plaque-like areas, or may be more nodular or cauliflower-like in appearance, arising from any location within the mouth. Others may be associated with the gum line, may be pink or discolored, and may <b>ulcerate</b> (break open and bleed).</p> <ul style="list-style-type: none"> <li>• These tumors may look small but may actually extend deeper into the tissues than expected, invading the underlying bone.</li> <li>• Your pet’s clinical signs will depend on the location, tumor type, tumor size, and presence of spread.</li> <li>• Oral pain is usually apparent, especially in pets with tumors that have penetrated the underlying bone. This may cause signs such as excessive salivation, excessive panting, bad breath (halitosis), lack of appetite, difficulty eating, and reluctance to be touched on the head.</li> <li>• Secondary infections are also common.</li> <li>• Swelling of one or both tonsils occurs with tonsillar SCC resulting in difficulty breathing and problems with swallowing. (<i>VCA Animal Hospital – Squamous</i>)</li> </ul> <p><b>What are the clinical signs of melanoma?</b> (<i>VCA Animal Hospital – Melanomas</i>)</p> <p>Lesions may appear as thickened and pigmented nodules, arising from any location within the mouth. These tumors may look small from the outside but extend deeper into the tissues than expected, invading the underlying bone.</p> <ul style="list-style-type: none"> <li>• Alternately, the bone may be affected first causing significant oral swelling.</li> <li>• Oral pain is usually apparent, especially in dogs with tumors that have penetrated the underlying bone.</li> <li>• Signs may include bad breath (halitosis), drooling, panting, movement or loss of teeth, bleeding from the teeth, lack of appetite or difficulty eating, reluctance to be touched on the head, facial swelling, and swelling of the lymph nodes. (<i>VCA Animal Hospital – Melanomas</i>)</li> </ul>
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<p>Testing</p> <p><b>Diagnosis</b> (<i>PetMD by Chewy</i>)</p>	<p><b>Diagnosis</b> (<i>PetMD by Chewy</i>)</p> <p>As part of a thorough physical examination, your veterinarian will look inside your dog's mouth for tumors or other abnormalities. This may require sedation.</p> <ul style="list-style-type: none"> <li>• <b>Bloodwork</b> and a <b>urinalysis</b> will provide insight about your dog's overall health status and are essential to planning appropriate treatment.</li> <li>• <b>X-ray</b> images of your dog's chest may show whether a growth in the mouth has spread to the chest, and a <b>CT scan or MRI</b> of your dog's mouth may be recommended to determine how invasive the tumor.</li> <li>• A <b>tissue biopsy</b> will be taken to determine which kind of cancer is present.             <ul style="list-style-type: none"> <li>○ In some cases, the entire visible mass can be removed and sent off for identification, but at other times, it's best to remove just a small piece of the tumor to better plan for future surgery and other necessary treatments.</li> <li>○ The veterinarian may also want to take a small sample from the lymph nodes to determine whether there are cancerous cells there.</li> </ul> </li> </ul> <p>(<i>PetMD by Chewy</i>)</p>
<p>Treatment</p> <p><b>Treatment and Prognosis for Dogs with Mouth Cancer</b></p> <p><i>First Vet</i></p>	<p><b>Treatment and Prognosis for Dogs with Mouth Cancer</b> (<i>First Vet</i>)</p> <p>Treatment of melanoma is two-pronged - localized treatment of the tumor and systemic treatment because of the high potential for metastasis.</p> <p><b>Surgery</b></p> <ul style="list-style-type: none"> <li>• Local control involves surgery to remove the entire tumor. To remove all of the mass, a portion of the bone of the upper or lower jaw may need to be removed. Most dogs do well after surgery without any impact on their quality of life.</li> </ul> <p><b>Radiation Therapy</b></p> <ul style="list-style-type: none"> <li>• When surgery is unable to completely remove the oral tumor, radiation therapy is given to help kill any residual disease and decrease or slow down the risk for recurrence.             <ul style="list-style-type: none"> <li>○ About 75% of patients that undergo radiation therapy experienced a decrease in tumor size depending on the stage of the disease.</li> </ul> </li> </ul> <p><b>Canine Melanoma Vaccine</b></p> <ul style="list-style-type: none"> <li>• There is a vaccine that is administered once every two weeks for four treatments for dogs with melanoma. A booster vaccine is given once every 6 months after the initial 4 doses.             <ul style="list-style-type: none"> <li>○ However, the vaccine has its downsides - it can take the dog's immune system a minimum of 2-3 months before it can mount an adequate immune response that will destroy the melanoma cells.</li> </ul> </li> </ul> <p><b>Chemotherapy</b></p> <ul style="list-style-type: none"> <li>• Chemotherapy is not recommended because it lacks efficacy. Less than 30% of patients have been shown to respond positively to chemotherapy which is often used for patients with fast-growing or aggressive tumors to slow down the growth and spread and to give time for the vaccine to work. (<i>First Vet</i>)</li> </ul>

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By PetMD Editorial

Reviewed by Jennifer Coates, DVM

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