

Salivary Mucocele

Surgery Service



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Locations

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1425 Michigan St. NE
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Anatomy

Dogs have salivary glands that are located both within lining of the mouth and in the head and neck region. Dogs have many salivary glands, but the most important ones include the zygomatic (located by the eye), mandibular (located just behind the jaw bone), sublingual (located under the tongue), and parotid salivary glands (located around the ear canal).

Causes of salivary mucoceles

The inciting cause of a salivary mucocele is usually not definitively identified; however, trauma from a choke chain, bites to the neck, and sudden hyperextension of the neck are suspected causes. These can cause stretching or tearing of the salivary gland or the duct that drains saliva from the gland to the mouth. Saliva accumulates under the skin and incites a marked inflammatory response. The body attempts to contain the leaking saliva by creating a layer of connective tissue around the saliva (called a mucocele).

Signs and diagnosis

Mucoceles are primarily found in dogs, but are rarely seen in cats. Mucoceles are more commonly seen in Dachshunds, German Shepherds, Poodles, and Silky Terriers that are at any age. The clinical signs associated with a mucocele are dependent on the gland that is affected:

1. Cervical mucocele is caused by damage to the mandibular or sublingual salivary glands or their associated ducts. A swelling located on the side or under the neck is most commonly seen.
2. Pharyngeal mucocele typically does not have an external visible swelling as the accumulation is located in the back of throat and will cause breathing difficulty. This is caused by damage to the mandibular or submandibular salivary glands or their associated ducts. Your companion may need to be anesthetized to allow examination of the throat to make a diagnosis.
3. Sublingual mucocele is also called a ranula and is a swelling under the tongue. This type of mucocele is caused by damage to the sublingual ducts or salivary gland.
4. Zygomatic mucocele is due to damage to the zygomatic gland and causes a swelling below the eye.



Other causes of a swelling in the neck may include inflammation of the salivary gland, salivary gland tumors, infection with abscess in the neck due to a foreign enlarged lymph nodes, and embryonic cysts such as a thyroglossal cyst, cystic Rathke's pouch, or a branchial cyst.

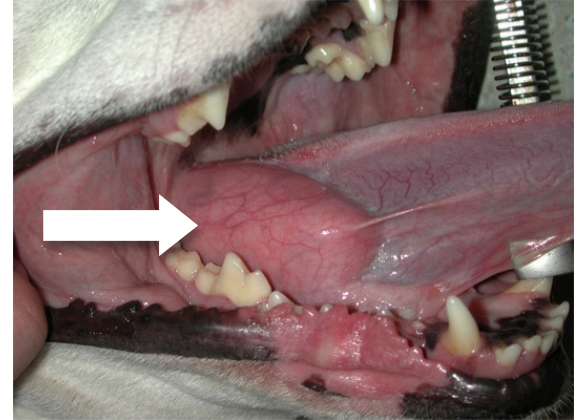
Prior to surgery, a fine needle aspirate of the swelling and examination of the fluid under a microscope should be performed. In addition, blood work such as a complete blood count and chemistry profile are completed to evaluate the internal organ health of your companion in

Salivary Mucocele Continued...

preparation for anesthesia and surgery.

The day of surgery

Our anesthesia and surgical team will prescribe a pain management program, both during and after surgery, that will keep your companion comfortable. This may include a combination of injectable analgesics, oral analgesics and anti-inflammatory medication.



Treatments

Conservative treatment consisting of a wait and see approach or draining the fluid from the cyst rarely results in resolution of the problem. Surgical removal of the involved salivary glands is the treatment of choice for a permanent cure of the problem. Although many important vessels and nerves that control tongue movement and swallowing are nestled around the gland, damage to these is very uncommon in the hands of an experienced surgeon. At the decision of the surgeon, a drain may be placed after the glands have been removed. Removal of a set of salivary glands will not impair your companion's ability to produce adequate saliva, as other glands will take over the function.

Aftercare and results

After surgery, you can continue to give your pet a prescribed pain reliever to minimize discomfort. It's also extremely important to limit your dog's activity and exercise level for three weeks after surgery. The incision should be checked daily for signs of infection. A drain may be placed in the incision and typically will be removed 5 to 10 days after surgery. The drain should be removed by one of our staff members after there is minimal fluid coming out of the drain. Two weeks after surgery, the surgeon will monitor the healing of the incision.

Short-term complications following surgery are uncommon and may include temporary bleeding at the surgical site, infection, nerve damage, and seroma formation (fluid accumulation under the incision). Recurrence of the mucocele is caused by incomplete removal of the entire abnormal salivary tissue and will necessitate a second surgery. Almost all patients are cured of the salivary mucocele with just one surgery.

Salivary Mucocele Continued...

Assessment and recommendations

Patient: _____ Date: _____

Treatment

- Surgery is recommended
- Surgery is not recommended
- Please make an appointment for a consultation with one of our oncologists

The following has been prescribed

- No medications or special diet are necessary at this time
- Antibiotic: _____
- Other medication: _____

Exercise

- Unlimited
- Please use a harness instead of a collar on your companion
- Confine your pet to the house other than very short leash walks necessary for bowel movements and urination
- Restrict exercise to leash walks 10 minutes twice daily

Preparation for surgery

- Start fasting your companion at midnight before the day of surgery; water should not be withheld
- Pepcid AC 10 mg tablets: give _____ tablet(s) with water (use syringe if needed) at 6 AM on the day of surgery

*Composed by Daniel A. Degner, DVM, DACVS
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