



Salivary gland removal (Sialoadenectomy)

Indications:

Dogs and cats have several salivary glands: under the tongue (sublingual), in the neck at the level of the lower jaw (mandibular), near the eye (zygomatic), and at the base of the ear (parotid) – and one of each on the left and right side.

While tumors can develop in the salivary glands, a more common disease (especially in dogs) is leakage of saliva from one (or several) of the glands, that then pools in the neck or pharynx (sialoceles), or in the mouth under the tongue (ranula). The cause for this is often unknown. The mandibular and sublingual salivary glands share one duct, and are anatomically joined together, and this gland complex is most commonly the origin of the saliva accumulation.

Preoperative workup and other diagnostics:

- General physical examination and oral exam
- A small sample of the fluid pocket is taken to confirm that the contents are saliva, and to assess if there is infection present.
- Preoperative laboratory work (CBC, chemistry profile)
- Imaging: a CT Scan of the head is typically recommended to determine which glands are involved, and if there is underlying pathology. In older patients, or if cancer of the salivary gland is suspected, imaging of the chest and abdomen might be recommended as well for a full diagnostic workup.
- Histopathology of the affected salivary glands (removed at time of surgery), and culture of the contents (if not already performed as part of the pre-surgical work up).

Procedure:

Drainage of the fluid pocket can be performed as a temporary measure, especially if the swelling interferes with eating or breathing in case of a ranula or pharyngeal sialocele. But the fluid typically builds up again.

Removal of the mandibular & sublingual salivary glands

An incision is made along the side or underside of the neck. The mandibular and sublingual salivary gland complex is dissected out, and removed. If a ranula is present, an additional incision in the mouth is needed to address this part of the disease.

In some cases – especially if the fluid pocket was large, or had been present for a long time, a drain might be temporarily placed.

Complications:

As with any surgical procedure, there are always risks associated with general anesthesia. For otherwise healthy pets, these risks are usually low, but are considered increased in animals with systemic illness.

Several important structures are located in the neck. As a result, the potential complications of a salivary gland removal include:

- Facial nerve paresis/paralysis (temporary in most cases, but may be permanent)



- Lingual paresis/paralysis - rare.
- Bleeding during surgery,
- Swelling of the neck immediately after surgery: the risk of severe swelling is increased if the sialocele is infected, large, or was present for a long time.
- Incisional dehiscence or infection
- Recurrence of the disease, or development of similar disease in one of the other glands.

Your surgeon will discuss these complications in more detail during your pet's visit.

Postoperative Care:

In hospital care:

- Severe swelling in this area might obstruct the airways, and patients are closely monitored in an ICU unit immediately after surgery.

At home care:

After your pet leaves the hospital we will have you continue to administer oral pain medications and antibiotics. Antibiotics are generally continued for 2-4 weeks depending on the particular condition. The specific type of antibiotic may need to be changed pending the results of the culture obtained at surgery.

Some animals may experience swelling in the neck following surgery. If this occurs, you will be instructed to apply either ice or a warm compress depending on the circumstances. Prior to this you will be asked to monitor your pet's incision for any signs of swelling, redness, discharge or pain.

Prognosis

Typically good if the affected gland is fully removed.