

Salivary Mucocoeles

What is a salivary mucocoele?

Salivary mucocoeles, also known as sialocoeles, are pockets of saliva within the soft tissues underlying the skin which result from leakage of saliva from one of the salivary glands.

Dogs have 4 pairs of salivary glands which supply saliva to the mouth. Salivary mucocoeles can develop in various locations around the head and neck depending on which salivary glands are involved. The most common location for mucocoeles to develop is under the chin, also known as the mandible.

These submandibular swellings are usually the result of leakage from either the submandibular or the sublingual salivary gland or duct. They can be the result of trauma, foreign bodies or tumours, but in the majority of cases the cause is unknown. Certain breeds of dogs are more likely to develop a mucocoele; these breeds include Toy Poodles and German Shepherds.

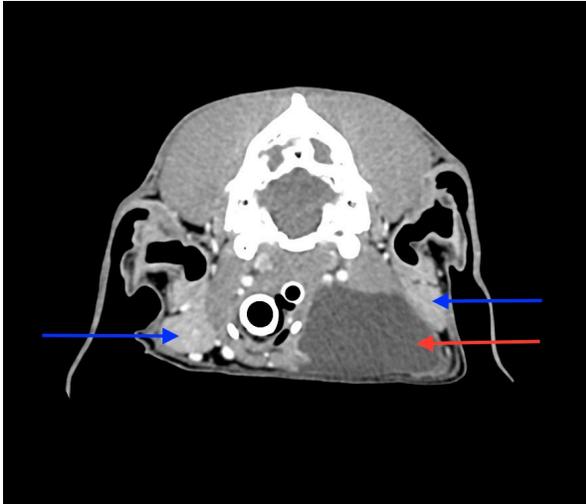
What are the signs of a salivary mucocoele?

The most common sign of a salivary mucocoele is a soft swelling under the dog's neck. These swellings are usually not painful and can fluctuate in size. On occasion, a swelling can develop under the tongue (this is referred to as a ranula).

How is a salivary mucocoele diagnosed?

It is important to distinguish a salivary mucocoele from other causes of neck swelling, such as abscesses or tumours. A full clinical examination will help to point towards a salivary mucocoele, although it may also be necessary to obtain a sample of fluid from within the swelling to confirm it is saliva.

The location of the swelling will often help to identify which salivary gland is involved. CT imaging is often used to help confirm which gland is affected, and to rule out salivary gland stones (sialoliths) and other underlying causes.



CT scan showing the salivary glands (blue arrows) and the large sialocele (red arrow).

How is a mucocoele treated?

Whilst draining the fluid can help to alleviate any pressure and temporarily improve the appearance of the swelling, it is not a permanent method of fixation.

Surgical excision of the affected salivary glands is the preferred treatment choice. The most commonly involved salivary glands are the submandibular and sublingual glands,

and as such surgery is performed through an incision under the jaw. The two glands are very closely associated and so are always removed as a pair.

What happens after surgery?

After surgery patients may remain in hospital overnight for additional pain relief and monitoring, or they may be comfortable enough to go home the same day. As long as all of the affected salivary tissue has been removed, then recovery from surgery is usually quick, however it may take several days for the swelling to resolve. In some cases, it may be necessary to place a silicone drain to allow any further fluid to leave the tissues whilst the area heals. This drain, if required, will be removed after 3-4 days.

Patients will go home with medication to help with any surgical discomfort and swelling, and the removed salivary glands will be sent to an external laboratory for testing.

A post-operative check up will be scheduled for 7-14 days after surgery. If the wound has fully healed by this appointment then normal exercise can be resumed.