

Canine Thyroid Carcinoma

What is a thyroid carcinoma and what are the clinical signs that one is present?

Thyroid tumors (carcinomas) are fairly rare in dogs, tend to be locally invasive, and have a moderate rate of movement to other areas of the body. The rate of growth of these tumors can be relatively fast, potentially causing discomfort when swallowing if no treatment is performed. This may progress to difficulty breathing and exercise intolerance if nothing is done to remove or decrease the size of the tumor.

What testing is needed to diagnose a thyroid tumor?

In general, advanced imaging of the neck and biopsy of the mass are needed to diagnose a thyroid tumor. This could include an ultrasound of the neck and/or a CT scan of the head and neck. Although a small needle aspirate can be taken of the mass, we typically do not recommend this as these tumors have a huge blood supply, which can lead to bleeding following the sample or lack of a diagnosis. Thus, a biopsy through surgical removal is the best way to definitively diagnose a thyroid tumor. Because these tumors can move to other areas of the body, testing the lymph nodes with a small sample and taking x-rays of the chest (or extending the CT scan into the chest) are recommended to look for spread of disease prior to pursuing surgery.

What is the treatment for a thyroid tumor?

The best treatment for a thyroid carcinoma is surgical removal. If the tumor cannot be removed entirely via surgery, radiation therapy may be considered following surgery to help control for disease recurrence. If you are not interested in pursuing surgery, radiation therapy alone is an alternative treatment. This has been shown to stabilize or even decrease the size of thyroid carcinomas. Surgery may become an option after radiation if tumor significantly decreases in size. Alternatively, in an effort to make your canine companion as comfortable as possible, a shorter course of radiation could be considered, with or without the addition of chemotherapy. This therapy aims to decrease swelling and pain, while minimizing side effects.

How well do dogs recover after surgery?

In one study dogs with moveable thyroid tumors and no evidence of cancer spread were treated with surgery alone and had a median survival of greater than 36 months (these were tumors that were completely removed).

Is chemotherapy recommended for thyroid carcinomas?

Due to the invasive nature of some thyroid tumors and the risk of cancer spread, in conjunction with surgery, and/or radiation therapy, we may recommend chemotherapy to delay or prevent the onset of cancer spread. In our hospital, carboplatin chemotherapy is given as an intravenous injection at 3-week intervals for a total of 4-6 treatments.

Alternatively, the use of low dose chemotherapy in combination with a non-steroidal can be considered, although at this time its benefit is suspected and not proven. Another option is to consider an oral chemotherapy drug called Palladia. A recent study of treatment with Palladia alone showed a partial response in 4 dogs and stable disease in 8 dogs (total number of dogs was 15). This response was maintained, on average, for about 6 months.