



at the heart of critical care

## ANIMAL EMERGENCY CENTER

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# ANAL SAC TUMORS IN DOGS

## Background

Tumors of the anal sacs are uncommon in dogs and very rare in cats. The anal sacs are paired glands found on either side of the anus, which are similar to the scent glands found in skunks. As with most tumors in animals and people, we do not know what causes them to occur.

## Clinical Signs

The most common presenting complaints for animals with anal sac tumors are licking the hind end, scooting along the ground, or straining to defecate. Some owners may notice a mass under the tail, and some dogs may produce flat, ribbon-like stools. Occasionally, an anal sac mass may be detected during a routine physical examination. In some cases, dogs may not present for signs related to the mass, but may present with signs related to an **elevated blood calcium** level. Some anal sac tumors can produce a hormone that raises blood calcium, and this can cause some dogs to drink excessively, produce large amounts of dilute urine, or show other vague signs of illness such as poor appetite, weakness or vomiting. This elevation in blood calcium can also cause kidney damage.

## Diagnosis and Initial Evaluation

When an anal sac mass is detected, one of the first steps is to obtain a **fine needle aspirate** or **biopsy**. These allow a sample of the affected tissue to be microscopically evaluated and a diagnosis obtained. Many times, this may be performed with the patient awake, or using quick-acting injectable sedation.

When a diagnosis has been reached, additional tests (called **staging**) are performed to determine if there is disease spread. The tests typically performed include **blood and urine tests** (looking at blood calcium level, liver/kidney function, and blood cell number), **X-rays** of the chest, and **ultrasound** of the abdomen.

## Treatment and Prognosis

In those cases where surgery is possible (the anal sac tumor is not too large or invasive, and there is no evidence of any spread further than the local lymph nodes), **surgery** is the best treatment. Even if there is spread to the lymph nodes, these can often be removed at the time of removal of the primary mass. The average survival time achieved with surgery alone is approximately 1 year, with dogs with lymph node spread or high blood calcium more likely to fall short of that mark.

Recent evidence suggests that the addition of **chemotherapy** to surgery may improve the outcome by approximately 50%. In other words, the average survival time may reach 18 months. Most chemotherapy protocols used for this type of tumor involve a treatment once every 3 weeks. Most pets tolerate chemotherapy very well, with only a small likelihood of developing serious side effects (please see the handout CHEMOTHERAPY IN PETS for more detailed information about this type of treatment).

There is also evidence that a triple approach, combining surgery, chemotherapy and **radiotherapy** may result in the best outcomes, with survival times of approximately 2 years reported in preliminary studies. Please see the handout VETERINARY RADIATION THERAPY for more detailed information about this treatment.

Some animals may need additional forms of treatment to address their other signs. For example, some may need medication to help control their blood calcium level, and others may need to eat a high-fiber diet and/or take stool softeners if they are having difficulty defecating.

Following the completion of treatment, we will recommend that your pet be seen for recheck examinations on a regular schedule. A typical schedule for these rechecks would be every 3 months for 1 1/2 years, then twice yearly thereafter. A thorough physical examination (including rectal examination), chest X-rays and abdominal ultrasound are recommended at these visits. If blood calcium level was elevated at the start of treatment, this may be rechecked as well.