

# Anal Sac Disease

## BASIC INFORMATION

### Description

The anal sacs are two small pouches under the skin near the anus at the 4 and 8 o'clock positions. These sacs hold a thick, fatty liquid that is strongly scented and produced by the anal glands. This liquid is used by wolves and wild cat species to mark their territories. In the domestic dog and cat, the use of anal gland secretions for territorial marking is much reduced or completely absent; however, the glands and their associated sacs are still present.

Occasionally the anal sacs become blocked (impacted) or infected. Anal sac disease occurs more commonly in dogs than in cats. Normal emptying of the anal sacs occurs with defecation. When the anal sphincter muscle opens, it compresses the sac, causing it to empty through the small opening of the anal sac duct. Dogs and cats can also empty their anal sacs voluntarily, but they usually only do so if they are frightened.

### Causes

Failure of the anal sacs to empty during defecation can occur when animals eat low-fiber diets that produce feces that are soft and do not stretch the anus. Hard, gritty material may accumulate within the sac, leading to swelling and possible obstruction. Infection of the anal sac duct, possibly from bacteria or fungal organisms living around the anus, can cause swelling of the duct and prevent the sacs from emptying. Sometimes the infection travels along the duct into the anal sac, and an abscess may form.

### Clinical Signs

Any impaction or swelling of the anal sacs can cause anal discomfort in both dogs and cats. The most common clinical sign is scooting or dragging of the animal's rear end on the floor while it is seated. Other signs include excessive licking of the anal area, a foul odor, and sometimes the presence of a small hole under the tail that drains pus or gritty mucous material. The area around the anus is commonly swollen, red, and painful.

### Diagnostic Tests

Your veterinarian may perform a rectal examination (using a gloved finger) to assess the size of the anal sacs and to look for masses or problems that can be confused with anal sac disease, such as an anal tumor or perineal hernia. Often the diagnosis of anal sac disease is obvious from clinical and rectal examinations.



Additional diagnostic tests are sometimes necessary in more complicated cases. A bacterial culture may be done if the anal sacs are infected. If any mass or lump is found near the anus, it may be aspirated with a needle. The material collected is then examined under the microscope. Laboratory tests may also be recommended, especially measurement of blood calcium, which can be elevated with certain anal sac tumors. X-rays may be considered prior to biopsy and removal of any masses.

## **TREATMENT AND FOLLOW-UP**

### **Treatment Options**

Uncomplicated impaction of the anal sacs can often be treated by manually expressing the sacs. After the sac is emptied, clinical signs usually disappear rapidly. Prevention of further impactions can be attempted by increasing fiber in the diet and ensuring that your pet has frequent opportunities to defecate.

Animals with infected anal sacs often need broad-spectrum antibiotics and manual expression of the sacs. Steroids can be used to reduce itching and swelling. In severe cases, surgical drainage of the abscessed gland may be needed. Surgical removal of the sacs may be recommended in animals with recurring impactions or infections. Cancer of the anal glands is treated by surgical removal of the tumor. Anal gland cancer can be very aggressive and can invade the lymph nodes of the abdomen, so referral to a veterinary oncologist may be recommended.

### **Follow-up Care**

Most cases of impactions resolve with therapy and do not require frequent follow-up visits. Notify your veterinarian if any signs recur. Dogs with infected or abscessed anal glands are often reexamined after 1 week of antibiotic therapy. If any clinical signs worsen, if the animal's appetite decreases, or if new signs appear (such as a foul odor or pus near the anus), seek further veterinary care for your pet.

### **Prognosis**

Prognosis for most dogs and cats with anal sac impaction is good, because most cases are easily managed with manual expression and dietary change. Dogs with infected or abscessed anal glands have a less certain prognosis, depending on the severity and depth of the infection. Dogs with anal gland tumors have a poor or grave prognosis, because these tumors often have spread to other parts of the body by the time they are detected.