



Veterinary Specialists of Alaska, P.C. Client Information Sheet:

General Information On Masses Originating From the Anal Sac In Dogs

Dirsko J.F. von Pfeil, Dr.med.vet., DVM, DACVS, DECVS; Mike Edwards, DVM, MS, DACVS

Masses originating from the anal or perianal area are most commonly apocrine gland tumors, circumanal gland tumors, perianal adenocarcinomas, or perianal adenomas. Differentials include lymphoma, soft tissue sarcoma, squamous cell carcinoma, mast cell tumor, or leiomyosarcoma or abscess.

At the time of initial examination it is usually not known what the origin of the mass in this dog is, but most often it is an **apocrine gland (or anal sac) adenocarcinoma**. More than 50% of dogs with this tumor have metastatic disease. Therefore it is first recommended to “stage” the animal, that is to perform various tests that will reveal knowledge about overall assessment of the dog’s health status, a diagnosis, information about extent of the disease, and will provide pertinent information on prognosis. The usual diagnostic work-up includes a metastatic study of the thorax, abdominal ultrasound with emphasis on the sublumbar lymph nodes, bloodwork (CBC, Chem), urinalysis, and either fine-needle aspirate or biopsy of the tumor.

There are numerous publications on prognostic factors. The most thorough evaluation on 130 affected dogs showed that the tumor size, whether the sublumbar lymph nodes are affected or not, and how large they are, and whether there is distant metastasis or not, are the most important prognostic factors (Polton et al. J Vet Intern Med 2007; 21, 274-280). A classification system of stage I-IV has been established. The above mentioned tests are necessary to classify a dog for a certain category. The reported survival rate for the different stages ranges from 2 months to 3 years. With large tumors and likely metastasis, the reported survival rate is approximately 6 months counted from the time of first clinical signs.

The cornerstone of treatment is surgery. This may improve quality of life. Most of the time, removal of the primary perianal mass is sufficient. However, the sublumbar lymph nodes can be affected and their removal should be considered. Surgery including sublumbar lymph node removal is associated with an increased risk of intra-abdominal hemorrhage if there are severe adhesions between lymph node and aorta. One series on five cases (Hobson, VetSurg 2006) with surgery including sublumbar lymphnode removal achieved a mean survival of 30 months. Based on the small case number of this study it cannot be expected to achieve a similar success with other cases.

If metastatic disease is present and if everything to prevent regrowth is desired to be done, it is recommended to follow-up with additional treatment such as chemotherapy and radiation therapy after surgery. Recommended chemotherapy medications include: Adriamycin – if not successful: Carboplatin - if not successful: Mitoxantrone. Radiation therapy can only be performed out of the state of Alaska.

Even if clean margins should be reported after surgery, there is still a chance for the tumor to grow back. The area should be evaluated on a monthly basis by a veterinarian to ensure that no regrowth is occurring. Thoracic radiographs are recommended every 3 months. With recurrence, complete restaging, likely followed by a second surgery, chemotherapy and radiation therapy are recommended.

More benign masses are **perianal adenomas**. This type of perianal tumor occurs occasionally in male, non-castrated dogs. It is hormonally dependant and its size can diminish dramatically after castration alone. However, it is recommended to first evaluate the dog for evidence of possible metastasis (see above). If no signs of metastasis, a castration should be performed and a biopsy of the mass obtained. Histopathology will reveal the definite diagnosis. If there should be evidence of a more malignant process, a second surgery with the goal of removing the entire mass should be scheduled.

Possible post-operative complications after surgery may include infection, which would indicate to remove the stitches and perform open wound management. Other possible complications may include, but are not limited to fecal incontinence, bleeding, or recurrence.

Your VSOA-Team!