Hope you have a safe & Happy Halloween

From
Aspen Meadow Veterinary Specialists

AMVS Event Updates!

AECC & AMVS’s CE on October 25th had a great turn out, We hope that those of you that attended had a great time and learned a lot about how to treat common toxicity poisoning and look forward to seeing you all at our CE’s in the winter.
Upcoming Events!

AMVS will be taking family and pet holiday portraits with Santa, at our facility in Longmont, CO so keep your eyes open for more information to be announced...

You can also find information about our upcoming events by checking out our Facebook page. Simply click on the link below.

Anal Sac Adenocarcinoma; Not Always a Pain in the Rear

By: Jim Perry, DVM, PhD, DACVIM, Oncologist; Orthopedic Surgical Resident

Practice Points:
1. Anal sac adenocarcinoma is a top differential in any animal presenting with hypercalcemia

2. Metastasis is present at the time of diagnosis in greater than 50% of animals with anal sac adenocarcinoma; staging should include blood work, UA, thoracic radiographs and abdominal ultrasound.

3. Surgery is the mainstay of treatment even when metastatic disease is evident within the local lymph nodes.

4. Carboplatin, doxorubicin and mitoxantrone can be considered following surgery, but no controlled studies have proven efficacy of adjuvant chemotherapy.

AMVS is:
PACE certified,
LEED certified,
and a zero-waste facility.

Archives of our past newsletters containing timely and useful medical information are on our website.
5. Palladia has recently been described to have a clinical benefit for the treatment of gross disease.

The anal glands in dogs and cats are small glands found next to the rectum and are lined with secretory apocrine gland cells. Tumors associated with these cells within the anal sac are commonly called apocrine gland adenocarcinoma or anal sac adenocarcinoma (ASACA). This type of tumor is relatively uncommon, but highly malignant in dogs. This is in contrast to the usually benign "perianal" or "hepatoid" gland adenomas that primarily occur in intact male dogs. ASACA often occurs unilaterally, but several case reports have described bilateral disease. In addition to being very locally aggressive, up to 50% of these tumors show evidence of spreading to other sites within the body at the time of diagnosis. The most common sites for these tumors to metastasize include the local lymph nodes (medial iliac/hypogastric LN), liver, and lungs.

Left anal sac adenocarcinoma
9yr old male Akita mix

The average age of diagnosis of ASACA is 10 years old. Greater than 25% of animals presenting with ASACA have hypercalcemia associated with the paraneoplastic production of a parathyroid-related protein (PTHrp). If hypercalcemia is present, this should be treated prior to surgery using IV non-calcium containing balanced crystalloid fluids, Lasix, bisphosphonates (Pamidronate: 1-2mg/kg IV diluted in 0.9% NaCl to be administered over 2 hours) or steroids (dexamethasoneSP at 0.7mg/kg IV or prednisone at 1-2mg/kg PO q24). The latter should only be used if diseases such as lymphoma have been ruled out. The use of calcitonin is discussed in many texts, but is rarely needed in addition to the more available and cost
effective treatment modalities listed above.

The mainstay of treatment for anal sac adenocarcinoma is surgery. Prior to surgery however, staging with blood work, thoracic radiographs, and abdominal ultrasound should be performed to determine the most appropriate treatment plan. While surgical removal provides the most significant increase in survival time, even in the presence of sublumbar lymph node metastasis, adjunctive chemotherapy and/or radiation therapy are often considered to further benefit the patient's disease free interval and survival time.

Negative prognostic factors for dogs with ASACA include evidence of metastasis, hypercalcemia, and tumor size at the time of surgery. The median survival time for dogs treated with surgery for ASACA with lymph node metastasis is 20 months (with primary tumor resection and sublumbar lymph node extirpation) and 30 months for dogs with tumor localized to the anal sac without evidence of metastatic disease. Patients with evidence of pulmonary metastases have even shorter survival times—only 7 months in one study. With regards to calcium levels, dogs presenting with hypercalcemia had significantly shorter survival (median, 9 months), compared with those that were normocalcemic (median, 20 months). Finally, dogs with primary tumors $\geq 10$ cm$^3$ had significantly shorter survival (median, 10 months) than dogs with tumors $\leq 10$ cm$^3$ (median, 20 months) following surgery.

Current chemotherapy recommendations included carboplatin, doxorubicin, and/or mitoxantrone. Since carboplatin and doxorubicin are both radiation sensitizing agents, mitoxantrone is often used if radiation therapy is being included in the protocol. Radiation therapy, when used, often includes 18-20 fractions, administered M-F. Side effects of radiation therapy to the sublumbar and perianal region can be severe, and therefore it is not currently recommended.

There is also recent evidence showing efficacy of tyrosine kinase inhibitors (Palladia) for the treatment of non-resectable ASACA or when surgery is otherwise not an option. In a recent study looking at dogs with gross disease, a clinical benefit was appreciated in 87% of the dogs treated with Palladia (25% partial responses and 62% stable disease). The median duration of a partial response in this study was 22 weeks and of disease-free survival was 22.5 weeks.
in this study was 22 weeks and stable disease was 30.5 weeks.

Currently at AMVS, the diagnostic and treatment recommendation for ASACA includes full staging with CBC, Chemistry, UA, thoracic radiographs and abdominal ultrasound. If the disease is localized to the anal glands with or without regional abdominal lymph node involvement, surgical removal of the primary tumor and lymph nodes is the mainstay of treatment. Adjuvant chemotherapy (6 doses of carboplatin) is recommended for large primary tumors (>10 cm³) or if metastatic disease is noted. If surgery or traditional chemotherapy is not elected or if distant metastatic disease is present, then Palladia is recommended with the goal in mind to delay progression as long as possible while maintaining a good quality of life. If hypercalcemia is present at any phase of the disease process, additional supportive therapies such as steroids or bisphosphonates are combined with the above treatment recommendations.
Thank you for your continued support!
-Aspen Meadow Veterinary Specialists

104 S. Main Street
Longmont, CO 80501
303-678-8844 (p)
303-678-8855 (f)

info@AspenMeadowVet.com
www.AspenMeadowVet.com