

## New Insight to Canine Flank Alopecia

Canine recurrent flank alopecia (cRFA) is characterized by well-demarcated areas of noninflammatory alopecia. Spontaneous regrowth of hair usually occurs within 3–6 months. Little is known about the pathogenesis of the disease. Skin biopsies from normal and affected skin were harvested from 2 dogs with spontaneously occurring disease and grafted onto 5 athymic mice. Over 30 days, the affected dogs still had alopecia. In contrast, the transplanted skin biopsy specimens regrew hair and hyperpigmentation disappeared. The regeneration of hair follicles in transplanted skin suggested causative factors of canine recurrent flank alopecia are likely to be systemic rather than local.

### ■ Commentary

CRFA is a common condition. Although the study concluded that cRFA is likely a result of systemic (not cutaneous) factors, it is important to counsel owners that many dogs with this condition are generally healthy. CRFA, although frustrating for many clients, does not mean the dog is systemically ill.—*William Oldenhoff, DVM*



### ■ ■ Source

Study of the behaviour of lesional and nonlesional skin of canine recurrent flank alopecia transplanted to athymic nude mice. Vandenaabeele SI, DeCock H, Van Ham L, et al. *VET DER-MATOL* 24:507-e120, 2013.

## Mast Cell Tumors: Cats vs Dogs

Mast cell tumors (MCTs) account for 2%–15% of tumors in cats. Cytologic diagnosis is easy to obtain, but there is no reliably predictive grading scheme. Feline MCTs are classified into cutaneous and visceral forms, with cutaneous predominating. Cutaneous tumors are histologically divided into atypical and mastocytic forms. The latter are more common and further classified as poorly differentiated or well differentiated. Atypical MCTs usually affect cats <4 years of age and spontaneously regress over 4–24 months. Visceral MCTs most commonly affect the spleen and intestines.

Complete staging should be performed in all cats with visceral MCTs, multiple cutaneous nodules, signs of systemic disease, abnormalities on abdominal palpation, or tumors with abnormal behavior or histology. Buffy coat smear evaluation is recommended; it is specific for MCTs and has been reported in cats with single cutaneous tumors. Multiple cutaneous tumors may represent metastasis from visceral MCT. Effusions can be seen in up to one-third of visceral MCT cases. Histamine

blockade is recommended and should be continued until complete surgical excision is confirmed, or for life in cases with visceral disease. Surgical excision is preferred, with good prognosis for most cutaneous tumors. The exceptions are poorly differentiated mastocytic tumors that are more likely to metastasize; wider surgical margins are recommended. Cats with surgical excision of splenic MCTs survive 12–19 months with splenectomy alone. Overall prognosis for intestinal MCT is poor; metastasis is common.

### ■ Commentary

MCTs are more common in dogs than in cats, and although it is tempting to assume that these tumors have similar behaviors in both species, there are some very important differences: First, tumor grade is a key prognostic factor for cutaneous MCT in dogs but not in cats. When dogs have multiple cutaneous MCTs, they usually are independently arising de novo tumors and do not affect prognosis; in cats, multiple cutaneous MCT can represent metastasis from a primary visceral tumor and often are more difficult to

treat. Most dogs with visceral mast cell disease have a primary cutaneous MCT that has metastasized to liver and/or spleen. Cats with visceral MCT more commonly have a primary visceral tumor, usually arising in the spleen or intestine. Surgery is not recommended for dogs with stage-IV MCT, but most cats with a primary splenic MCT have metastasis to liver, bone marrow, and/or skin at the time of diagnosis, yet splenectomy is still recommended. This substantially helps improve signs and efficacy of follow-up therapy. There are reports of remaining metastatic disease spontaneously regressing post splenectomy. Feline MCTs release serotonin in addition to histamine. I, therefore, prefer cyproheptadine instead of diphenhydramine, as it blocks both H<sub>1</sub> and serotonin receptors. It has the additional benefit of increasing appetite.—*Dennis Bailey, DVM, DACVIM (Oncology)*

### ■ ■ Source

Mast cell tumors in cats: Clinical update and possible new treatment avenues. Henry C, Herrera C. *J FELINE MED SURG* 15:41-47, 2013.

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