Basal Cell Tumors in Dogs and Cats

By Dr. Karen Becker

Hi, this is Dr. Karen Becker, and today we're going to be discussing basal cell tumors in dogs and cats. A basal cell tumor is a slow-growing, disordered overgrowth of the cells on the outer layer of your pet's skin called the epidermis. Generally speaking, a benign proliferation of basal cells is called a basal cell tumor, while a malignant proliferation is called basal cell carcinoma. Sun exposure is a common cause of basal cell tumors in people, but not much evidence exists that the same is true for pets.

Basal cell tumors typically develop in middle-aged and older dogs, especially in certain breeds like the wirehaired pointing Griffon, the Kerry blue terrier, and the wheaten terrier. In dogs, the tumors are typically found on the head, in particular in the ears, the neck, and the forelimbs. When it comes to cats, older domestic longhairs, Himalayans, and Persians are the breeds most at risk.

Manifestations

In kitties, the tumors can develop almost anywhere on the body. In both dogs and cats, basal cell tumors appear as firm, solitary, encapsulated and oftentimes hairless or ulcerated bumps that sometimes could be attached to the skin by a stalk. The tumors vary in size from less than one centimeter to a large tumor that can be 10 centimeters in diameter. In cats in particular, the tumors are often pigmented.

While most basal cell tumors in cats and dogs are benign, they can grow quite large and tend to ulcerate and also then be secondarily infected or inflamed. Malignant basal cell tumors are most often seen in senior and geriatric cats, especially in Persian-type kitties. These tumors often look like ulcerated spots on the head, neck, or legs. Unlike benign basal cell tumors, these carcinomas are flatter, locally invasive, and may have more than one center. Fortunately, local or systemic metastasis of these tumors is rare, thankfully.

In dogs, malignant basal cell tumors are usually called basosquamous carcinomas (BSC). These typically develop in older dogs. Saint Bernards, Scottish terriers, and Norwegian elkhounds are at the highest risk. Unlike benign basal cell tumors, these carcinomas can be found almost anywhere on a dog's body. Thankfully, they are also unlikely to metastasize.

Diagnosis and Treatment

Your veterinarian may suspect a basal cell tumor just by its appearance on your pet's body. However, a confirming diagnosis is made through microscopic examination of the tissue. That will require a fine-needle aspiration or a tissue biopsy. Those samples are sent to a lab to be examined by a veterinary pathologist, who will determine whether the tumor is benign or malignant, along with its grade and stage. This information will help your veterinarian make the very best treatment protocol for your pet.

The standard treatment for basal cell tumors, whether benign or malignant, is surgical removal. Cryosurgery, which is freezing via liquid nitrogen, is sometimes used for really tiny lesions. Benign tumors can recur if they're not completely excised, which happens when the surgeon can't remove a wide enough margin around the tumor or if it's in a location where getting the entire tumor is impossible to do.

Sometimes kitties will develop other basal cell tumors in the general area of the original basal cell tumor. Occasionally basal cell carcinomas will also recur, but they develop slowly and, thankfully, metastasis is very rare to occur as well. However, basosquamous carcinomas in dogs tend to be more aggressive than other types of basal cell tumors.

Fortunately, for most dogs and cats, they're able to make a full recovery after complete excision of a basal cell tumor.

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