

5 TYPES OF SKIN CANCER IN DOGS

The skin is the largest organ of a dog, and tumors affecting this structure are common. Between 60 to 80 percent of skin tumors in dogs are benign, meaning if you notice a lump on your dog's skin, there's a good chance it won't be anything to worry about. However, the visible appearance of a growth can't be used to predict whether or not it's cancerous. Therefore, any new lump or bump you detect on your dog's skin should be evaluated by a veterinarian.

Many skin tumors can be cured with early surgical removal. If a growth is removed from your dog's skin, it must be submitted for evaluation by a veterinary pathologist. This is the best way to determine if further treatment is necessary. The following is a list of the more common skin tumors seen in dogs, along with basic information about their behavior and recommended testing and treatment options.

MAST CELL TUMOR

Mast cells are immune cells normally involved in allergic reactions. They contain packets of chemicals (called granules) that are released upon stimulation by an allergen. Mast cells are located throughout the body and dogs have a large proportion located within their skin. Mast cell tumors are found more frequently in Boxers, Boston Terriers, Labrador Retrievers, golden Retrievers, Beagles, Pugs, Shar Peis, and Bulldogs, but any breed can be affected.

A diagnosis of a mast cell tumor can usually be made via a fine needle aspirate. A small needle, the same size that's used to draw a blood sample or give a vaccine, is introduced into the mass and a syringe is used to extract cells. These cells are distributed onto a slide and evaluated either by your veterinarian or submitted to a lab for analysis by a clinical pathologist.

Surgical removal is recommended for all confirmed mast cell tumors. A pathologist will review the sample and assign a "grade" to the tumor. The grade is the best predictor of whether follow-up testing and treatment is recommended. Low-grade tumors are usually cured with complete excision, whereas high-grade tumors are more likely to grow back and spread to distant sites in the body. In those cases, radiation therapy and chemotherapy are recommended to extend survival time.

MELANOMA

Unlike people, most cutaneous (skin) melanoma tumors in dogs are benign. Melanoma occurs more frequently in dogs with dark pigmented skin. Cutaneous melanoma tumors are usually solitary and appear as small brown/black masses. They can also appear as large, flat, or wrinkled tumors. Fine needle aspirates can be done on such tumors; however, they are less likely to exfoliate (distribute into the syringe during aspiration), so the sample obtained in this manner might not be diagnostic.

Most melanoma tumors are diagnosed after they are removed. Malignant (cancerous) melanoma occurs less frequently but can be aggressive. Distinguishing a benign melanoma from a malignant one is done via biopsy. Benign melanoma tumors are cured with surgery. Malignant melanoma tumors can spread to local lymph nodes and lungs and additional treatment with chemotherapy and/or immunotherapy is recommended.

SQUAMOUS CELL CARCINOMA

Squamous cell carcinoma is a rare form of skin cancer in dogs. Tumors are found more frequently in light-skinned, hairless, or sparsely haired portions of the skin. At-risk breeds include Dalmatians, Bull Terriers, and Beagles. Short-coated dogs who spend a long time outdoors also have a higher incidence of squamous cell carcinoma. Most squamous cell carcinomas of the skin appear as firm, raised, and often ulcerated plaques and nodules. Tumors can often grow outward into large masses and have a surface that resembles a wart. Treatment includes surgery to remove the primary tumor. Incompletely excised tumors can be treated with radiation therapy to prevent regrowth. These tumors infrequently spread to local lymph nodes and the lungs. Some dogs develop multiple cutaneous squamous cell carcinoma tumors. These can be challenging cases to manage and may require medical treatment with either oral or topical drugs.

TUMORS OF THE SKIN GLANDS

Most glandular tissue tumors in dogs are benign (e.g. sebaceous hyperplasia or sebaceous adenoma). Malignant glandular tumors include sebaceous gland carcinomas, apocrine gland carcinomas, and eccrine carcinomas. Sometimes benign tumors can be recognized visually, but it is still best to remove any questionable mass and submit the tissue for biopsy. Most malignant glandular tumors can be treated with surgery alone. However, if the tumors are incompletely excised, radiation therapy is recommended to prevent recurrence. Dogs with malignant tumors should also be screened for any evidence of spread of disease via chest X-rays and regional lymph node aspirates.

HAIR FOLLICLE TUMORS

Like glandular tumors, most hair follicle tumors are benign and cured with surgical removal, despite their intimidating assortment of names (e.g. keratinizing acanthoma, trichoblastoma, trichoepithelioma, pilomatricoma). Malignant hair follicle tumors include malignant trichoepithelioma and malignant pilomatricoma. Differentiating a benign tumor from a malignant tumor can only be done via biopsy.

EPITHELIOTROPIC LYMPHOMA

While technically not a skin tumor, another common cancer that occurs in the superficial layers of the skin is epitheliotropic lymphoma. [Lymphoma](#) is a blood-borne cancer of lymphocytes, a type of white blood cell. Lymphocytes are found throughout the body, including the skin, where they offer protection against various pathogens that this organ can come into contact with. There are several forms of lymphoma in dogs, and epitheliotropic lymphoma is a specific variant diagnosed via biopsy of an affected region of skin. Treatment of choice is chemotherapy, though surgery can be recommended in some cases. The prognosis is usually guarded; however, dogs who are diagnosed earlier in the course of their signs and have not received previous treatment with steroids can do well long-term.

Epitheliotropic lymphoma should be considered as a diagnosis in dogs with persistent and progressive skin lesions that do not resolve with typical treatment for more common skin issues (e.g. food allergies or skin infection).

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