



The Pet Oncologist

Skin Cancer in Dogs & Cats



What is skin cancer?

Skin cancer (also called skin tumours or skin neoplasms) are common in dog and cats. Skin cancer accounts for around 25 to 45% of all cancers in dogs, and about 20 to 30% of all cancers in cats. Skin cancer can be benign, where they do not invade nearby tissue or spread to other parts of the body (i.e. metastasis). However, they can be malignant, where they can potentially invade nearby tissue, and spread to other parts of the body, such as the lymph nodes, lungs, or internal organs. The majority of skin cancer in dogs are benign (57.5 to 80%). Conversely, the majority of skin cancer in cats are malignant (50 to 65%).

What causes skin cancer?

Dogs and cats of all ages are at risk of skin cancer. The cause of skin cancer is generally unknown. However, viruses, ultraviolet (UV) radiation, ionising radiation, immunosuppression, and genetic factors, likely play a role.

How is skin cancer diagnosed?

When a skin mass or lesion is detected, every attempt should be made to obtain a specific diagnosis. Knowledge of the type of skin cancer will assist your veterinarian in determining the prognosis, and appropriate treatment recommendations for your pet.

A diagnosis is usually confirmed by sampling the skin mass or lesion with cytology (fine needle aspirate samples) or biopsy (tissue sample). Cytology is usually the first step, and is performed

by directing a small needle into the skin mass or lesion, often without the need for sedatives. Cytology will yield single cells or small sheets of cells. Sometimes a specific diagnosis of tumor type can be obtained with cytology. However, for many skin cancers, cytology is usually only sufficient to determine if the cells are potentially a benign cancer or malignant cancer. Often, a biopsy is required for confirmation. Biopsy involves sampling of tumor tissue (e.g. surgery) that will usually require pets to undergo general anaesthesia. The biopsy specimen is then assessed by a pathologist under a microscope (i.e. histology) to try to determine the specific skin cancer type. The pathologist can also evaluate the aggressiveness of the cancer. In some situations, a diagnosis via biopsy cannot be obtained, and further stains (i.e. immunohistochemistry) are required to try to obtain a diagnosis of a specific skin cancer type.

What other tests are required?

In pets with suspected or confirmed malignant skin cancer, staging to check if the cancer has spread is recommended. Depending on the specific type of skin cancer, staging tests include lymph node evaluation, chest x-rays, abdominal ultrasound, computed tomography (CT) scan, and/or magnetic resonance imaging (MRI) scan. In addition, blood and urine tests are often recommended to assess your pet's general health, and determine if any other diseases or medical conditions (i.e. comorbidities) may affect management.

How is skin cancer treated?

Treatment will depend on the specific type of skin cancer, and can vary from leaving the skin cancer in place and monitoring it closely, surgery, chemotherapy, radiation therapy, and/or immunotherapy. Your veterinarian will discuss the individual treatment recommendations available for your pet.

How do I check my pet for skin cancer?

You can help monitor for new skin cancers by regularly running your hands over your pet to check for any skin masses or lesions. Once identified, no matter how small or insignificant you think the skin mass or lesion may be, it is important to alert your veterinarian. A body map can be performed by your veterinarian, and/or photographs taken. These can help track the skin growths that have been evaluated over time.

I hope this information helps pet owners understand more about skin cancer in dogs and cats. If you have any questions or concerns about skin cancer in your pet, please contact your veterinary health care team.