

Skin – Sweat Gland Tumors

These notes are provided to help you understand the diagnosis or possible diagnosis of cancer in your pet. For general information on cancer in pets ask for our handout "What is Cancer". Your veterinarian may suggest certain tests to help confirm or eliminate diagnosis, and to help assess treatment options and likely outcomes. Because individual situations and responses vary, and because cancers often behave unpredictably, science can only give us a guide. However, information and understanding about tumors and their treatment in animals is improving all the time.

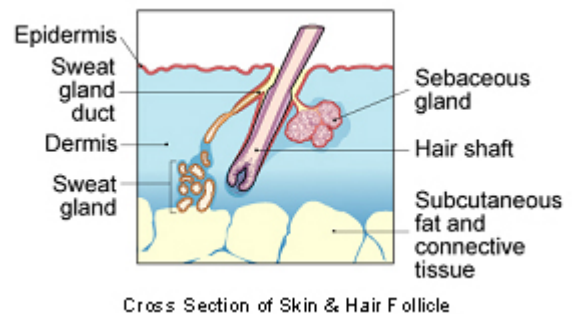
We understand that this can be a very worrying time. If you have any questions please do not hesitate to ask us.

What is this tumor?

This tumor is a disordered and purposeless overgrowth of sweat gland cells.

"Most sweat gland tumors are benign and can be permanently cured by total surgical removal."

Most sweat glands are attached to the hair follicles ("paratrichial", or beside the hair) but a few are not associated with follicles (atrichial). Most sweat gland tumors are benign and can be permanently cured by total surgical removal. Malignant tumors that spread to other parts of the body are rare.



Cross Section of Skin & Hair Follicle

What do we know about the cause?

The reason why a particular pet may develop this, or any cancer, is not straightforward. Cancer is often the culmination of a series of circumstances that come together for the unfortunate individual. It is the result of non-lethal genetic damage to cells, with "external" contributory factors such as radiation, chemicals, hormones and infections. The mutated cells upset the normal regulation of cell death and replacement. They do this by activating growth-promoting oncogenes (cancer genes), inactivating suppressor genes and altering the genes that regulate normal, programmed cell death (apoptosis).

We do not know precisely what causes sweat gland tumors. Induction of cancer is a multi-step process called tumor progression. The majority of sweat gland cancers never progress past the first stages and are technically hyperplasias (overgrowths) rather than true, out-of-control cancers. Hyperplasia and benign tumors (adenomas and complex adenomas) grade into each other.

Is this a common tumor?

The tumors are uncommon in both dog and cat. They are usually found in animals over six years of age but can occur earlier. Malignant tumors are rare and when they do occur, tend to be in slightly older animals. They are slightly more common in cats than dogs.

On the eyelid, these tumors are frequently multiple. Their location makes full excision difficult.

How will this tumor affect my pet?

These tumors are usually noticed as lumps, and the main problems are physical because of the size and location. They are often cystic, and may ulcerate and bleed, or become secondarily infected. Tumors may be painful if they have ruptured because sweat is an irritant.

The malignant tumors (adenocarcinomas) are locally aggressive. Distant metastasis only occurs after some time. It is more likely to occur in cats than dogs.

How is the tumor diagnosed?

"Clinically, these tumors resemble other tumors of the skin."

Clinically, these tumors resemble other tumors of the skin. They may be dark in color so can be mistaken for other tumors. Accurate diagnosis relies upon microscopic examination of tissue. To obtain the appropriate samples, your veterinarian may recommend one or more of various sampling techniques such as fine needle aspiration, punch biopsy and full excision. Needle aspiration for microscopic examination of cell samples (cytology) may be helpful for rapid or preliminary screening, but is less diagnostic than histopathology. Histopathology is the microscopic examination of specially prepared and stained tissue sections. Your veterinarian will submit the samples to a specialized laboratory for examination and diagnosis by a veterinary pathologist. Histopathology will give the most accurate diagnosis and prognosis (prediction of behavior).

The diagnosis includes words that indicate whether a tumor is "malignant". Malignancy is often shown by the word ending "carcinoma".

What treatment is available?

Treatment is surgical removal of the lump. If this is sent for histopathological examination, the diagnosis can be confirmed, the completeness of excision assessed and other more aggressive forms of cancer ruled out.

Can this tumor disappear without treatment?

Tumors very rarely disappear without treatment. Very occasionally, spontaneous loss of blood supply to the cancer can make it die but the dead tissue will still need surgical removal. The body's immune system is not effective in causing this type of tumor to regress.

How can I nurse my pet?

Preventing your pet from rubbing, scratching, licking or biting the tumor will reduce itching, inflammation, ulceration, infection and bleeding. Any ulcerated area needs to be kept clean.

After any surgery, you need to keep the incision site clean and dry and prevent your pet from interfering with it. Report any loss of stitches or significant swelling or bleeding to your veterinarian. If you require additional advice on post-surgical care, please ask.



How will I know if the tumor is permanently cured?

"The histopathology report will give your veterinarian the information that will help to indicate how the tumor is likely to behave."

The histopathology report will give your veterinarian the information that will help to indicate how the tumor is likely to behave. The veterinary pathologist usually adds a prognosis that indicates the probability of local recurrence or metastasis (distant spread).

Sweat gland hyperplasia and benign tumors can be cured by surgery. The rare malignant tumors can usually be cured surgically, because metastasis is unusual and rarely occurs at an early stage of the cancer.

Are there any risks to my family or other pets?

No, these are not infectious tumors and are not transmitted from pet to pet or from pets to people.

*This client information sheet is based on material written by: Joan Rest, BVSc, PhD, MRCPath, MRCVS
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