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Cat Tips

How to Spot the 4 Most Common Feline Carcinomas

Cats can develop tumors almost anywhere, but some types are much more common. If you have one or more feline family members, you need to know how to spot the signs so you can act promptly. Here are two recommendations for supporting any pet already diagnosed.

Analysis by <u>Dr. Karen Shaw Becker</u>

STORY AT-A-GLANCE

- Cats can develop tumors almost anywhere in the body; four common types of feline cancer are lymphoma, soft tissue sarcomas, squamous cell carcinoma, and mammary carcinomas
- If your feline family member is diagnosed with cancer, partner with an integrative oncologist and/or a practitioner with experience using a variety of innovative cancer therapies, including targeted nutrition
- Steps you can take at home to help your cat avoid cancer include feeding an anti-inflammatory diet, keeping her at a healthy weight, refusing unnecessary vaccinations, and reducing her exposure to toxins and chronic stress

Cats can develop tumors almost anywhere in the body, but some types of cancer are much more common in kitties than others, including lymphoma, soft tissue sarcomas, squamous cell carcinoma, and mammary carcinomas.

It's important for those of you with feline family members to be aware of these particular cancers and how to spot their symptoms. As with any disease, the earlier a pet is diagnosed and a treatment protocol instituted, the better the chances of a positive outcome.

Lymphoma

Lymphoma is an incurable cancer of the lymph system, which is part of the immune system. In cats, one in three cancer diagnoses is lymphoma, most often of the gastrointestinal (GI) tract. Common symptoms include weight loss, vomiting, loss of appetite, and diarrhea.¹

Possible risk factors include having feline leukemia virus (FeLV) and/or feline immunodeficiency virus (FIV), genetics (Siamese cats are overrepresented) and diet. Many cats today have inflammatory bowel disease (IBD), or **irritable bowel syndrome (IBS)**, which causes intermittent vomiting. IBD can progress to GI lymphoma in cats, so chronic vomiting in any kitty should be investigated.

To avoid increasing your pet's lymphoma risk, make sure he isn't exposed to home toxins, including lawn chemicals — especially those applied by professional lawn care companies — or cigarette smoke. A Tufts University study linked secondhand smoke to cancer in cats.² The study found that cats living with smokers are more than twice as likely to develop malignant lymphoma as those in smoke-free homes. And cats with five or more years of second- and third-hand smoke exposure had a three times higher risk.

Soft Tissue Sarcomas

Soft tissue sarcomas are malignant tumors of the connective, muscle, or nervous system tissues, and are frequently found on the chest, back, side, legs and face of affected cats. This category of sarcomas includes liposarcoma, fibrosarcoma, nerve sheath tumor (aka neurofibrosarcoma), and rhabdomyosarcoma.

Symptoms depend on the location of the sarcoma on a cat's body. The most common signs include a mass you can feel, lameness, vomiting, and difficulty urinating.

Vaccine-associated sarcomas (VAS) are another type of soft tissue sarcoma that can develop weeks, months, or even years after a vaccination. VAS, also called feline injection-site sarcomas (FISS), are primarily triggered by the feline rabies vaccine and the feline leukemia virus (FeLV) vaccine.

The veterinary community has long been aware of the problem of vaccination-related sarcomas in cats. The majority of the first diagnosed vaccine-related sarcomas developed between the shoulder blades of affected kitties. This is the area of a cat's body where all vaccines were typically injected prior to the mid-1990s.

Fast forward to 2013, when after years of trying to determine the best areas of the body to vaccinate cats, a team of veterinary researchers published a study suggesting that tail vaccinations could make surgical treatment of vaccine-associated sarcomas easier and less disfiguring, which could in turn encourage more owners to have their cats treated for cancer.

As an integrative veterinarian focused on proactively maintaining wellness in pets, I'm much less interested in which body parts are best for vaccine injections (and subsequent amputation as a treatment for sarcomas) than I am in determining which **vaccines an animal truly needs** based on established immunity, age, lifestyle, and actual risk exposure.

Squamous Cell Carcinoma

Squamous cell carcinomas are fast growing, locally invasive malignant tumors that can occur in various locations on the body, but most commonly develop in the mouth. Symptoms include difficulty eating, mouth pain, bleeding from the mouth, bad breath, weight loss, excessive drooling, and swelling of the upper or lower jaw.

Secondhand smoke has been linked to squamous cell carcinoma in cats.³ Kitties are particularly vulnerable to the carcinogens in tobacco smoke because daily grooming exposes delicate oral tissues to hazardous amounts of cancer-causing substances. Cats living with more than one smoker and those exposed to environmental tobacco smoke for

longer than five years have especially high rates of squamous cell tumors.

Mammary Carcinomas

Mammary carcinomas (breast cancer) is the third most common cancer found in female cats. Kitties actually have two rows of mammary glands, with four glands in each row. They run the entire length of a cat's underside, when means mammary tumors can develop "from the armpit to the groin,"⁴ and can metastasize (spread) to lymph nodes, adrenal glands, the lungs, liver, and kidneys.

Symptoms include one or more masses beneath the skin of the stomach area you can feel, and warmth and/or pain in the affected area.

If Your Cat Has Been Diagnosed With Cancer

My friend and fellow integrative veterinarian, Dr. Nancy Scanlan, has done a great deal of pet cancer research. In our **2017 interview**, Dr. Scanlan offered two specific recommendations to support the immune system in pets diagnosed with cancer:

"Number one is the whole *mushroom* family. There are a number of mushroom products out there. Research on mushrooms shows they actually stimulate the cells of the immune system in ways that are similar to immunoaugmentative therapy in humans. They make immune system cells stronger, more active, and able to make more chemical messengers.

Number two: Chinese herbs that specifically stimulate the immune system. In Chinese medicine, it's called Wei Chi. In addition, there are herbs that actually have specific effects on cancer cells — herbs in the astragalus family or Chinese medicine with astragalus as part of the formula, along with formulas that include red clover, essiac and hoxsey.

Holistic vets are familiar with these products. We try to use the ones that have the most scientific support behind them."

If your cat is diagnosed with cancer, or you're concerned about her future health, my first recommendation is to team up with an integrative oncologist or functional medicine veterinarian, as most conventional vets don't use food as medicine (aka targeted nutrition), immune-modulating supplements and other innovative, less toxic treatments for cancer.

If there's no suitable veterinarian in your area, keep in mind that some integrative practitioners also do phone consultations. Finding an integrative veterinary oncologist can also be important when it comes to slowing certain types of cancers.

All the supplements in the world won't fix a poor diet that may be contributing to the growth of cancer cells. Transitioning your pet to a minimally processed **species-specific diet** rich in antioxidants (and far fewer carcinogenic high-heat pet food byproducts), healthy fats and fatty acids and ultra-low carbohydrates is a critical piece of a cancer treatment protocol.

From there, your cat may benefit from adjunctive therapies like hyperbaric oxygen therapy, IV antioxidant therapy, specific immunomodulatory nutraceuticals and other adjunctive therapies, which your integrative veterinarian can recommend.

4 Actions You Can Take to Help Your Cat Avoid Cancer

1. **Feed an anti-inflammatory diet** — Anything that creates or promotes inflammation in the body increases the risk for cancer. Current research suggests cancer is actually a chronic inflammatory disease, fueled by highly refined carbohydrates (starch and sugar). The inflammatory process creates an environment in which abnormal cells proliferate faster.

Most cancer cells require the glucose in carbohydrates to grow and multiply, so you want to eliminate that cancer energy source. Carbs to remove from your pet's diet include processed grains and starchy vegetables like potatoes and corn.

Keep in mind that all extruded dry pet food ("fast food") contains some form of potentially **carcinogenic**, highly processed starch. It may be grain-free, but it can't be starch-free because it's not possible to manufacture kibble without using some type of starch. The correlation between consuming fast foods and cancer has been established in humans,⁵ and my advice is to incorporate as much fresh or minimally processed, real food into your entire family's diet as you can afford.

Cancer cells generally can't use dietary fats for energy, so higher amounts of good quality fats are nutritionally beneficial for cats fighting cancer, along with an adequate amount of human grade protein and no carbs. Basically, a low ratio ketogenic diet.

Another major contributor to inflammatory conditions is a diet too high in omega-6 fatty acids and too low in omega-3s. Omega-6s increase inflammation while the omega-3s do the reverse. Processed cat food is typically loaded with omega-6 fatty acids and deficient in animal-sourced omega-3s (DHA/EPA), and those that may have been present are now processed at very high temperatures making them a health hazard to consume.

In addition to Advanced Glycation End-products (<u>AGEs</u>) found in ultra-processed cat foods there is also the issue of cats consuming other immune-disrupting chemicals, including phthalates and <u>flame retardants</u>.

2. **Don't allow your cat to become overweight** — Studies show that restricting the number of calories an animal eats prevents and/or delays the progression of tumor development across species. Fewer calories cause the cells of the body to block tumor growth, whereas too many calories can lead to obesity, and obesity is closely linked to increased cancer risk in humans.

There is a connection between too much glucose, increased insulin sensitivity, inflammation, and oxidative stress — all factors in obesity — and cancer. It's important to remember that fat doesn't just sit on your cat's body harmlessly. It produces inflammation that can promote tumor development.

- 3. Refuse unnecessary vaccinations Vaccine protocols should be tailored to minimize risk and maximize protection, taking into account nutritional status, lifestyle (including time spent outdoors), and overall vitality of the pet. We know vaccines can cause cancer⁶ and we know <u>titer testing</u> is a responsible way to ensure your pet has adequate immunity in place of over-vaccinating on an annual basis.
- 4. **Reduce or eliminate your cat's exposure to toxins and minimize chronic stress** These include chemical pesticides like flea and tick preventives, and indoor chemicals linked to cancer (some pest control products), tobacco smoke, flame-retardants found on most imported cat beds and carpeted scratchers, chemical household cleaners, and air scenting products like candles and plug-ins. Research shows cats bioaccumulate these substances in far greater amounts than any other family member, predisposing them to more DNA damage. Because we live in a toxic world and avoiding all chemical exposure is nearly impossible, I also suggest offering a periodic detoxification protocol to your cat.

Identifying and removing sources of chronic stress in your cat's life is also proving to be important, according to research.⁷ Intentionally focusing on daily environmental enrichment and opportunities for cats to just be cats on a daily basis is important in creating happy, healthy pets.

Sources and References

1,4 PetMD

² Elizabeth R. Bertone, Laura A. Snyder, Antony S. Moore, Environmental Tobacco Smoke and Risk of Malignant Lymphoma in Pet Cats, American Journal of Epidemiology, Volume 156, Issue 3, 1 August 2002, Pages 268–273

- ³ p53 expression and environmental tobacco smoke exposure in feline oral squamous cell carcinoma. Snyder LA, et al. Vet Pathol. 2004 May;41(3):309-14
- ⁵ <u>CNN, September 18, 2018</u>
- ⁶ Vet Med (Auckl). 2017; 8: 13–20. Published online 2017 Jan 12. doi: 10.2147/VMRR.S116556
- ⁷ Mac Vet Rev 2016; 39 (2): 201-208