

**Dog Tips** 

# This Aggressive Cancer Is Quite Sneaky and Often Strikes Without Warning

Your pet could suddenly die when the tumor ruptures as it causes severe hemorrhaging - accompanied by these 7 signs. Average survival time is only 90 to 180 days with conventional treatments. But with this promising holistic treatment, she could live over a year.

Analysis by Dr. Karen Shaw Becker

### **STORY AT-A-GLANCE**

- Hemangiosarcoma is an aggressive, malignant form of cancer that often strikes without warning. It is much
  more common in dogs than cats, especially dogs of a certain breed and age
- Hemangiosarcoma most often originates in a dog's spleen, but can also develop in other organs, including the skin
- Often there are no symptoms of illness until a pet suddenly begins to hemorrhage and the cancer is diagnosed during treatment. When signs do occur, they are usually symptomatic of blood loss
- Conventional treatment of hemangiosarcoma typically involves surgery and chemotherapy, but the prognosis
  is poor. Integrative therapies can include herbs, medicinal mushrooms and other nutraceuticals, and
  transitioning to a ketogenic diet
- High-risk dogs should undergo regular blood tests and abdominal palpation, and owners might also want to consider regular ultrasound imaging of the spleen

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Of all the types of cancers that strike companion animals, hemangiosarcoma is one of the sneakiest. Sadly, more often than not, a pet suddenly develops internal hemorrhaging and the disease is diagnosed as a result of the crisis.

Hemangiosarcoma is almost exclusively a disease of dogs, though it does occasionally occur in cats. Dogs of any breed, gender and age can develop this type of cancer, but it's most commonly seen in dogs between the ages of 6 and 13, and in the following breeds:

- German Shepherds
- Boxers
- Golden Retrievers
- Doberman Pinschers
- Labrador Retrievers
- English Setters

## Hemangiosarcoma: Cancer That Starts in the Blood Vessels

Cancer can occur in any number of different organs in the body, for example, the intestines, liver and bones. In hemangiosarcoma, the tumors develop in the endothelial cells that line the blood vessels of the circulatory system. Hemangio is the Greek word for blood vessel; sarcoma means a malignancy of connective tissues.

Because the tumors involve blood vessels, they're often filled with blood and when they rupture, they can trigger massive internal or external bleeding. Hemangiosarcoma can occur wherever there are blood vessels in the body, but most often develop in the spleen, heart, liver, skin and soft tissue.

This type of cancer is aggressive and highly metastatic, meaning it frequently spreads to other organs, including the brain, lungs, spleen, heart, kidneys, skeletal muscle and bone.

## Dermal, Hypodermal and Visceral Hemangiosarcoma

In dogs, hemangiosarcoma is classified as dermal, hypodermal or visceral. Dermal and hypodermal tumors account for about 15% of cases, while visceral tumors make up the remaining 85%, with 50% of those originating in the spleen.

**Dermal hemangiosarcoma** occurs in the skin, and is associated with sun exposure. The tumor is usually either a red or black growth located on an area of the dog's body with little or no fur (the belly), or white fur. Dogs with short white coats tend to be predisposed to this type of tumor.

Dermal hemangiosarcoma is the easiest form to treat surgically and holds the best chance for a complete cure. However, about one-third of these tumors have the potential to metastasize internally, so it's important to identify and treat them promptly.

If a nontoxic protocol (black salve, bloodroot preparations, etc.) doesn't entirely remove these cutaneous tumors, they should be excised to prevent metastasis while simultaneously working to improve your pet's immune health.

**Hypodermal or subcutaneous hemangiosarcoma** tumors occur just below the skin and may feel either soft or hard. These masses often develop on the neck, chest, or trunk area. The skin covering the tumor can look perfectly normal, while the tumor beneath the skin is a dark red growth.

Up to two thirds of these tumors spread internally, so again, the earlier the mass is identified and completely resolved with aggressive holistic modalities or surgically removed, the better the dog's chances of recovery.

**Visceral hemangiosarcoma** develops in internal organs, most often the spleen and the right chamber of the heart. About 25% of dogs with splenic hemangiosarcoma also have tumors in the heart.

# **Hemangiosarcoma Symptoms**

Because dogs most often get the visceral form of hemangiosarcoma, frequently no signs of disease are present in the early stages. Even dogs with large tumors will show no symptoms early on. Unfortunately, by the time a dog is symptomatic he is usually in an advanced and life-threatening stage of the disease.

Hemangiosarcoma tumors invade surrounding normal tissue and spread to other parts of the body. Over time, small ruptures in the tumors can develop that allow blood to escape into the abdomen, chest, the sac around the heart or right below the skin (subcutaneous).

This blood loss causes some dogs to show intermittent symptoms of lethargy and weakness, but usually the signs are so subtle they go unnoticed or are attributed to another less serious cause. Other subtle signs can include a decrease in appetite, mild anemia and slight elevation of liver enzymes.

When the tumors metastasize they aggressively invade the lungs, liver and/or intestines. Often dogs with hemangiosarcoma die abruptly when a tumor ruptures, causing severe hemorrhaging.

Signs of a life-threatening hemorrhage include weakness, a pale color to the tongue, panting, rapid heartbeat, weak pulse, a distended abdomen and collapse. In dermal and hypodermal hemangiosarcoma, a mass can often be felt in or under the skin. It may become ulcerated and bleed.

## **Traditional Treatment Options**

There have been no significant advancements in the traditional treatment of canine splenic hemangiosarcoma in decades, probably because it's not a type of cancer humans get, so research funds are limited.

Unfortunately, available standard treatments can only moderately extend the life of dogs with this disease — they do not provide a cure or give the animal extra years of life.

Because the disease isn't typically diagnosed until it's advanced, standard treatment is surgery to remove the spleen, followed by aggressive chemotherapy. Sometimes surgery isn't possible or practical, for example in cases of extensive spread to other organs.

Average survival time for dogs treated with surgery alone is about 90 days; 180 days is the average survival period for dogs that undergo both surgery and chemotherapy.

# **Alternative Options**

Integrative veterinarians use a variety of nontoxic herbal protocols to support patients with hemangiosarcoma, including turmeric and medicinal mushrooms, as well as Chinese herbs including Yunnan Baiyao and a variety of other nutraceuticals, including IP-6, sulforaphane, Poly-MVA and hyperbaric oxygen and ozone therapy.

The University of Pennsylvania School of Veterinary Medicine has been studying the use of medicinal mushrooms (focusing on Coriolus versicolor) in dogs with hemangiosarcoma, with promising results. For example, dogs with splenic hemangiosarcoma who receive no treatment live an average of 86 days, but some of the dogs given the mushroom complex as their only treatment lived over a year.

Many owners of dogs with hemangiosarcoma opt out of chemotherapy because it doesn't dramatically improve survival time, is expensive and requires several trips back and forth to the vet, which is stressful for both pet and owner. Many parents of sick dogs feel that overall, chemo treatments decrease their pet's quality of life.

An effective mushroom compound that is less expensive than chemo and also has no reported adverse side effects may help dog owners extend their pet's life without regular trips to the vet. Many holistic veterinarians include other nutraceuticals and herbal blends as well.

I also strongly recommend addressing nutrition immediately when a pet is diagnosed with cancer. Eliminating all dry food (kibble) is important because of the amount of starch needed to manufacture this type of food. There is only one **human-grade, fresh dog food for dogs fighting cancer** on the market today. Feeding a high-fat, low-to-moderate protein and ultra-low carb diet is critical for providing the right macronutrients for pets battling cancer.

KetoPet Sanctuary has added additional medium-chain triglycerides to homemade, raw meat-based diets to also effectively address cancer with a change in macronutrients. This is what is known as a ketogenic diet that helps starve tumors and slow down the rate of metastasis.

A ketogenic diet combats cancer because cancer cells use glucose as a source of energy. The primary source of glucose is carbohydrates. Malignant cancer cells have very limited ability to use fat as an energy source, and they use protein for energy only after it has been processed by the liver to form glucose.

Starch (which rapidly turns into sugar) is abundant in pet foods, including "grain-free" kibble. Hidden sources of starch in your pet's diet include potatoes, tapioca, lentils, chickpeas and pea products.

It's impossible to produce dry food without a starch component, so I recommend stopping all dry foods when your pet is fighting cancer (and if you want to prevent cancer, I also recommend eliminating dry food and the **carcinogenic byproducts** that occur during manufacturing).

KetoPet Sanctuary has been successfully utilizing a ketogenic diet to slow, stop and even reverse different types of cancer in rescue dogs. Their protocol includes a stringent 120-day plan that involves calorie restriction and a homemade, high-fat, carb-free and raw food diet. For more info, you can contact them at

#### <u>info@ketopetsanctuary.com</u>.

Another benefit of a maintenance ketogenic diet is it's calorie-dense, which can be very helpful for pets who have lost a lot of weight due to their illness. I also recommend checking vitamin D levels in dogs that have been diagnosed with any type of cancer and optimizing their levels through appropriate supplementation, if necessary.

# If Your Dog Is a High-Risk Breed

I recommend yearly blood tests for at-risk breeds under age 10, and every six months for older dogs at high risk. In my experience, mild anemia has been the most consistent clue there could be an underlying issue requiring further diagnostics. At these appointments, I also perform a careful palpation of the abdomen to check for any abnormalities or changes, but even then, it can be difficult to feel tumors hiding deep in a dog's abdomen.

In addition to regular bloodwork and abdominal palpation, a third option is ultrasound imaging. The spleen can be easily visualized during an ultrasound exam, as can any large, irregular masses within it. With early detection, it's possible to remove the spleen before the tumor ruptures or metastasizes.

If your dog is a high-risk breed, you might want to consider regular ultrasounds of the spleen starting at around age 5, repeated at least yearly. Ultrasound imaging is noninvasive, has no side effects and is well-tolerated by most pets.

Since there is a chance the heart may be affected as well, if a tumor is found on the spleen, the heart should also be visualized with ultrasound. If the heart is involved or there is metastasis to the lungs, surgery is probably not a good option due to the risks of anesthesia, as well as the fact that once the splenic tumor has metastasized, the prognosis is poor.

I don't recommend removing a cancerous spleen as the only form of treatment. Removing a tumorous spleen may eliminate the symptoms of the current immune system meltdown, but it doesn't address why it occurred. If the only form of treatment recommended is a splenectomy without a lifestyle change, I wouldn't do it if it were my dog because statistically, you don't gain much.

However, if you aggressively address the immune crisis with an **integrative veterinarian** and are willing to supply a number of immune modulating supplements several times a day, a splenectomy in conjunction with a holistic protocol can extend your dog's quality of life in many cases.

Something else I never recommend is prophylactic splenectomy (removing a healthy spleen to prevent splenic hemangiosarcoma), since it is unlikely to provide a benefit in inhibiting the cancer. In addition, the spleen has an important role to play in the body.

Dogs can function without one, but it will have an impact on their health. The spleen is an important part of the lymphatic system, removing old blood cells and contaminants from the blood and circulatory system. It works with the immune system to defend the body from disease, and is the only resource for red blood cells other than bone marrow.

# **Final Thoughts**

Because cancer of the lymphatic system is the No.1 type of cancer plaguing dogs and cats today, and because more and more dogs are being diagnosed with malignant spleen tumors (also associated with the lymphatic system and immune-regulation), I strongly encourage proactive owners to evaluate their pet's environmental chemical load before the detoxification and lymphatic pathways become overburdened.

Eliminate lawn chemical exposure (fertilizers, herbicides), indoor chemical use (including pest control, nonorganic cleaning supplies and floor cleaners) and pet beds sprayed with PBDEs (that means virtually all pet beds not labeled organic). Remove the chlorine and fluoride from your pet's water, feed a minimally processed, real food diet and eliminate any mold issues (or other airborne toxins, including cigarette smoke) in your pet's living space.

Ask your veterinarian to titer in place of annual vaccines, re-evaluate the amount of monthly pesticides placed directly on your pet (all conventional flea and tick medications) as well as the chemicals you feed your pet (heartworm pills). Institute an intermittent detox program that includes manually rinsing chemicals off your pet, if needed.

#### **Sources and References**

VetStreet June 11, 2015 Canine Cancer