

HEMANGIOSARCOMA ----- “THE SILENT KILLER”

HEMANGIOSARCOMA is called “The Silent Killer” because it develops silently and quickly. Your dachshund can appear fine, active and healthy on Friday and by Sunday, be dead.

Hemangiosarcoma is a malignant tumor of blood vessel cells, or to put this in layman terms, it is a cancer of the bloodstream. It originates in the bone marrow. In one form of the disease, the blood vessels grow weak, and there is a small rupture in one vessel. In the early stages the blood vessel quickly repairs itself and the blood that had escaped during the rupture is resorbed. This may happen over and over again for months. The only sign is that during this time of rupture and repair the dog might grow quiet for a period of time. Unfortunately, the blood that is reabsorbed is full of cancer cells and unfortunately the disease spreads throughout the system.

Hemangiosarcoma is a common cancer in many breeds of dogs – Golden Retrievers, Portuguese Water Dogs and German Shepherd Dogs to cite a few - and is now seen in all three coats of dachshunds. It can strike at any age, but occurs mostly in dogs that are older than 6 years of age.

SIGNS TO LOOK FOR – At first your dog may show signs of lethargy and weakness. He may be off his food. He just wants to be left alone. His stomach may appear hard and

distended in the evening as the blood from ruptured vessels fills the abdomen. His gums are pale and he appears cold. Overnight, the blood is absorbed and in the morning, the dog may appear that he is okay...but the process continues again. Eventually the dog’s fast growing tumor will rupture resulting in hemorrhaging, shock and then death.

Physical examination will find a large firm mass in the area of the spleen upon palpation. Radiographs of the abdomen area may show a mass. Follow up radiographs of chest would be done to see if the tumor has spread. A basic blood panel may show responsive anemia, typical of bleeding. An older dog with an unexplained bleed is highly suggestive of a splenic tumor.

WHAT CAUSES HEMANGIOSARCOMA? – We do not know, at this date, what causes hemangiosarcoma. Since it is classified as a “genetic disease,” it could be caused by environment or genetics.

Three research groups are working in cooperation with one another: Dr. Mathew Breen, the Breen lab at NC State U, Dr Jaime Modiano, Un of MN College of Veterinary Medicine, and Dr.Kerstin Lindblad-Toh, Dir. of the Vertebrate Genome Biology Program at Broad Institute (MIT) Massachusetts. The coordinator is Breen – all samples are to sent there. Van Andel Institute is an independent research group also working to find a cure.

TREATMENT – there is no test for early diagnosis of hemangiosarcoma. And, usually hemangiosarcoma is not diagnosed until the dog is in the late stages.

If palpation shows evidence of a splenic mass, removal of the spleen (splenectomy) may be done. The dog may survive 3 or 4 months. Chemotherapy may extend his life for up to 6 months.

However, once the spleen is removed, since the cancer is in the blood stream, it will find another organ – such as the heart or liver.

KINDS OF HEMANGIOSARCOMA –

- 1- Skin form – easiest to remove surgically and has greatest potential for complete cure. Look for rosy red or black growth patches on the skin.
- 2- Subcutaneous or hypodermal – overlying skin can appear normal. Surgery may show a dark red blood growth under the skin.

- 3- Hemangiosarcoma of the spleen – splenic tumors tend to bleed slowly. These growths tend to break open and bleed profusely. It is important to send samples to a lab to test to see if the mass is malignant or benign is important.
- 4- Heart-based hemangiosarcoma – the sac around the heart, the pericardium, fills up with blood.

WHAT YOU SHOULD DO –

Down load the forms from the research institutions found on the DCA website and give them to your vet to keep in your dog's files along with a copy of the consent form that must be sent with the samples.

You can find the download forms at –

http://www.breenlab.org/docs/other_2008-01.pdf

If and when you and your dog face this terrifying disease, you will be in no position to think straight.

BIOLOGICAL SPECIMENS REQUIRED

You will want your vet to collect the following:

1. 5- 10mls of blood in EDTA tubes (lilac top). Keep cold in a refrigerator then ship overnight with a cold-pack in a well- padded container.
2. Clean, representative, blueberry-size tumor biopsy sample (or at least 2 tru- cuts, 14 gauge) in a sterile empty tube. Please keep tissue samples and blood cool in the refrigerator and then ship cold (**not frozen**) overnight.
3. Clean, representative, blueberry- size tumor biopsy sample (or at least 2 tru- cuts, 14 gauge in 10% formalin.

Please ensure these samples are all collected in the correct clinical specimen collection container and that each is sealed well to prevent leakage. Please ensure that each sample tube is labeled with the dog's first and last call names, breed, the date of collection and the tissue type.

For safety, please ensure that the shipment packaging complies with the regulations of the carrier used.

PAPERWORK REQUIRED:

1. A copy of the pedigree and AKC number. Please tell us also the call name and last name of the dog on the consent form.
2. A copy of any relevant diagnostic pathology report.
3. A copy of relevant recent (last three months) clinical history and treatment protocols and/or any planned protocols not yet administered.
4. A signed copy of the study consent form found on the DCA website.

PLEASE SEND PACKAGE TO:

BREEN Lab Room 330A,
Dept. of Molecular Biomedical Sciences
CVM Research Building NCSU
College of Veterinary Medicine
1060 William Moore Drive
Raleigh, NC 27607

**FOR ADDITIONAL INFORMATION PLEASE GO TO THE DCA WEBSITE
AND CLICK ON “NEW HEALTH STUDY” – THEN HEMANGIOSARCOMA.**

The DCA Health & Welfare Trust Fund will reimburse the cost of shipping the samples to the Breen laboratory.

Submit copies of shipping invoices to:
Ruth Robins,, Trust Administrator
DCA Health & Welfare Trust Fund
4314 Westport Terrace, Louisville
KY 40207-7014

HOW CAN YOU HELP?

The DCA Health & Welfare Trust Fund currently contains funds that have come from donations specifically earmarked for hemangiosarcoma research and education. Several dachshund breeders have asked how they can help to increase the monies available for this purpose. They have expressed a desire to make a contribution in the memory of one of our beloved dachshunds who might have succumbed to this terrible disease.

If you would like to help, you may send a contribution to:

DCA HEALTH & WELFARE TRUST FUND

% Eleanor Ruth Robins
4314 Westport Terrace
Louisville, KY 40207-7014

Please specify on your check: FOR HEMANGIOSARCOMA RESEARCH.

Hopefully, through your generous donations, we may be able to find a cure for this disease.

You will receive a thank you letter along with a tax receipt for any donation made.