TUFTS CUMMINGS SCHOOL OF VETERINARY MEDICINE

Your Dog

The Newsletter for Caring Dog Owners

SILENT KILLER & CURABLE

Dogs of any age can be susceptible to hemangiosarcomas - malignant tumors arising from blood vessels - but those middle-aged and over 8 are especially vulnerable. The aggressively spreading cancer may go undetected until the last stages, making it a silent killer.

Although they can be found almost anywhere in the body, about 80 percent of all hemangiosarcomas begin in the spleen, said John Berg, DVM, chair of the Department of Clinical Sciences at the Cummings School of Veterinary Medicine at Tufts University. The spleen, a large organ in the abdomen, stores blood, among other functions. *"Fewer hemangiosarcomas arise in the heart and fewer still in other sites, such as the skin,"* he said. *"And although not directly heritable, there appears to be a predisposition among purebreds - particularly large breeds such as German Shepherds, Labradors and Golden Retrievers."*

Surgery can often cure the form of the disease affecting the skin. In that location, the tumor often doesn't metastasize, or spread, to distant sites. Otherwise, hemangiosarcomas are rarely curable. As long as expectations are realistic, however, temporary remissions are possible. *"Many dogs recover quickly from tumor removal surgery and, although they may only have a short time left, the quality of life during this time can be excellent,"* said Dr. Berg, a surgical specialist.

Because splenic hemangiosarcomas develop internally, they often give little warning until they become quite advanced. The spleen may suddenly begin bleeding, and blood may enter the abdomen. *"A dog may exhibit sudden weakness or he may collapse,"* Dr. Berg said. *"His gums look pale and his pulse is rapid. He is in danger of going into shock or even dying. If this happens, consider it an emergency and get your dog to a veterinarian."*

DISTENDED ABDOMEN

An alternate scenario occurs when the tumor grows slowly within the spleen without bleeding. *"The dog's abdomen may become quite distended," said Dr. Berg. "The tumor may grow as large as a basketball and weigh five pounds or more. Owners may not recognize the presence of a tumor of this size because organs within body cavities, such as the liver, lungs, kidney or spleen, have a lot of reserve capacity, and tumors within them often must become very large before they make a dog feel ill. Also, tumors within the body are difficult to see or feel until they are quite large."*

Understandably, dogs with such tumors may act *"off,"* exhibiting low energy and reduced appetite. They may tire easily, and they may experience weakness, rapid breathing and depression.

In some instances, veterinarians find hemangiosarcomas during a physical exam. Abdominal swelling may suggest the disease in an older, large-breed dog. Bloody fluid aspirated from the abdomen is even more suggestive. For hemangiosarcomas of the spleen and heart, the key test is ultrasound, said Dr. Berg. *"In splenic hemangiosarcoma, the image shows a huge mass - the primary tumor - attached to the spleen."* It might also re- veal metastases to the liver. Veterinarians take X-rays to rule out metastases to the lungs.

Without treatment, the average time from the tumor's discovery until death of affected dogs is under two months. Some dogs die suddenly after showing no symptoms apparent to their owners. When an older, large-breed dog dies suddenly, owners might consider an autopsy. A diagnosis of hemangiosarcoma can prevent agonizing over possible reasons for the death of a beloved pet.

SPLEEN REMOVAL

If no definitive evidence of advanced metastases is found, veterinarians usually recommend a splenectomy - removal of the spleen - for splenic hemangiosarcoma. Dogs tolerate this relatively simple surgery well. Certain tumors involving the heart can also be removed, although this surgery is more complex and entails a slightly longer recovery period. *"Removal of the spleen makes the dog feel normal again and prevents sudden bleeding that the tumor might otherwise cause,"* Dr. Berg said.

Virtually all dogs undergoing removal of heart or splenic hemangiosarcomas will eventually die of metastatic disease. Their average lifespan with treatment is four months; however, the added time is important to many owners. When the end does approach, most dogs will develop signs such as sudden weakness, breathing difficulty or poor appetite At that point, owners should consult their veterinarian, and if advanced metastases of the tumor are confirmed, euthanasia should be considered.

Radiation therapy usually doesn't play a role in the treatment of hemangiosarcomas. And although chemotherapy may be given in an effort to slow the growth of metastases, it's not likely to cure the cancer, Dr. Berg said. *"If owners want to feel they've done everything possible and perhaps obtain some more time for their dog, they may consider chemotherapy. However, there are no definitive studies proving it prolongs survival times."*

Because the chemotherapy doses used in animals are lower than those used in people, dogs receiving chemotherapy usually don't experience severe side effects, he said. *"The expense may be a bigger factor in a dog owner's decision whether to go with chemotherapy."* A typical regimen of chemotherapy in a large breed dog may cost $1,000 to $3,000.

Surgery remains the cornerstone of treatment for splenic hemangiosarcoma. *"For some owners, the prospect a good quality of life for several months makes the surgery worthwhile,"* Dr. Berg said. *"It may give a dog another spring, summer or fall, and hours and hours of quality time with his owner."*