

HEMANGIOSARCOMA

Hemangiosarcoma is an aggressive cancer that arises from blood vessels. The cancer can be found anywhere in the body (because blood vessels occur throughout the body). Hemangiosarcoma is most commonly found in the spleen, liver, and heart. Prognosis is determined by the location of the disease. Although any breed of dog can develop hemangiosarcoma, certain breeds of dogs appear to be at higher risk, such as the German Shepherd, English Setter and Golden Retriever. We do not know what triggers the growth of this type of cancer.

SYMPTOMS

Symptoms of hemangiosarcoma are usually determined by the location of the disease. Many dogs with the cancer in an internal organ show signs of intermittent or persistent weakness or even collapse. Because the cancer is producing abnormal blood vessels, these vessels tend to be very weak and prone to leaking. Further growth leads to rupture of one of these cancerous vessels, resulting in loss of blood. As the spleen is the internal organ most commonly affected by this cancer and is an organ that filters the blood, rupture can lead to blood loss into the abdomen. Rapid loss of blood causes weakness or collapse. If only a small amount of blood is lost, the episode of weakness can be temporary, as that blood can be reabsorbed into the body. If a large amount of blood is lost, the weakness is so profound that the dog may collapse. This can be an emergency situation. Distention of the belly may also be observed because of the large volume of free blood in the abdominal cavity. If the cancer is on the heart this bleeding occurs into the sac that surrounds the heart, resulting in a compromise of the heart's ability to pump blood effectively. This also can cause weakness and potential collapse.

METASTASIS

A further problem exists when the cancerous blood vessel ruptures. The release of blood into a body cavity carries with it cancer cells, effectively resulting in bathing of the cavity with cancer cells. This, along with the ease with which cancer cells break off from the abnormal blood vessels and thus gain access to the rest of the body through the bloodstream, results in rapid dissemination of cancer throughout the body. This spread of cancer to distant sites is termed "metastasis." It is this widespread metastasis that makes hemangiosarcoma so difficult to treat. Often the cancer has metastasized before any clinical signs are evident.

STAGING

When hemangiosarcoma is diagnosed (or suspected), a number of diagnostic tests will be performed to stage your dog's cancer. Staging includes a series of tests to determine how far the cancer has spread in a patient, allowing you to make informed decisions regarding treatment. Radiographs (x-rays) of the chest will be performed to evaluate the size of the heart and the lungs

and look for metastasis. A complete blood count, chemistry profile, and urinalysis will be obtained to assess your dogs overall health status. We may perform a coagulation blood panel to evaluate the ability of your dog's body to clot blood. We may also perform an ultrasound examination of the abdomen and/or the heart in search of metastasis. Other tests may be recommended, depending on individual circumstances.

TREATMENT

Treatment for hemangiosarcoma involves two different modalities. The first is often surgery to remove the primary tumor. Sometimes, if multiple sites of metastases are found during the diagnostic testing, surgery will be of no benefit. Whenever we are dealing with cancers that have a high potential to metastasize, we use chemotherapy.

Fortunately, chemotherapy in dogs and cats is very different from "chemo" in people. Because our focus is on quality of life for our pets we never want the treatment to be worse than the disease. This is not to say that some dogs may not have any side effects caused by the chemo, but in the few dogs that do show side effects, the signs are typically mild and temporary. Most breeds of dogs do not lose their hair (they have fur which grows differently from hair). Your veterinarian or cancer specialist will discuss possible side effects with you at greater length.

PROGNOSIS

Unfortunately, hemangiosarcoma is not curable. Dogs with internal organ involvement who are treated with surgery live an average of only 2 months. Dogs who do not have identifiable metastasis at the time of surgery and who are treated with chemotherapy live an average of 6 to 10 months. Some dogs with demonstrable metastasis may also respond to chemotherapy, providing a prolonged quality of life compared with dogs that are not treated at all. Dogs with this type of cancer located in the subcutaneous tissues (just under the skin) live an average of about 6 months with surgery alone. Hemangiosarcoma can also occur on the skin of dogs. This appears to be a form of cancer induced by exposure to the sun and carries a much better prognosis than the internal form of the disease. Surgical removal of the skin form, provided it did not arise as a metastasis from the more aggressive form, provides a disease-free interval of about 1.5 years. New lesions can continue to form, however, because of previous or continued sun damage and exposure.

New types of treatments are being investigated continuously in the hope for improving the response rate of dogs with this disease. Again, quality of life is always the main goal, and this can often be achieved by working closely with your veterinary team.