



Splenic Hemangiosarcomas in Dogs

Hemangiosarcoma is one of the more aggressive forms of cancer diagnosed in dogs. It is a cancer of the cells that line blood vessels, and therefore can be found in any part of the body; however, the most common sites include the spleen, liver, and right auricle of the heart. Splenic hemangiosarcoma is primarily found in older dogs, with German Shepherds and Golden Retrievers being the most commonly affected breeds.

Clinical signs

- Splenic hemangiosarcoma is very dangerous because there are very few signs of the cancer until the spleen either ruptures or the cancer happens to be spotted on a routine abdominal radiograph or ultrasound. This is largely due to the fact that the spleen is deeply seated in the body.
- In fact, many dogs that are diagnosed with splenic hemangiosarcoma present to their veterinarian for collapse, pale mucous membranes and blood in their abdomen from a mass rupturing.

Diagnosis/staging

- Splenic masses can sometimes be seen with abdominal radiographs but are more often diagnosed with an abdominal ultrasound. In either case, once a splenic mass has been detected, it is in the patient's best interest to undergo further diagnostics (i.e. staging tests).

- Staging tests evaluate for evidence of metastatic (spread of the cancer) disease. Staging tests include:
 - An abdominal ultrasound (if not already performed) to evaluate for disease in any of the abdominal organs
 - Chest radiographs determine if there is any evidence of disease in the lungs or heart
 - Blood work is recommended and consists of a CBC (which checks the red and white blood cells and platelets), a chemistry panel to look at organ function, a urinalysis and blood clotting times
 - An echocardiogram of the heart is sometimes warranted because some studies have shown that around 5% of patients with splenic hemangiosarcoma can have a mass in the right auricle of the heart as well.

Treatments

- Surgery is the primary treatment for a splenic mass.
 - This is preferably done before the mass or masses rupture, but often the patient presents in a crisis secondary to rupture of the mass leading to emergency surgery.
 - With surgery alone, the survival time is approximately 1-2 months with patients succumbing to metastatic disease.
- Chemotherapy is advised post-op due to the high metastatic potential even if the spleen was removed and there was no obvious metastatic disease (spread). The primary chemotherapy drug used to treat hemangiosarcoma is doxorubicin (also known as adriamycin).

- Side effects may include vomiting, diarrhea, nausea and/or lethargy but in most patients the side effects are self limiting. In addition doxorubicin has also been shown to have a cumulative toxicity on the heart; therefore, doxorubicin has a lifetime dose, and an echocardiogram may be recommended prior to the first treatment to obtain a baseline of the heart function and then again prior to the 5th or 6th treatment.
- Adriamycin is administered intravenously once every 3 weeks for 4-6 treatments.
- Patients treated with surgery and chemotherapy have an average survival time of 4-6 months but this also depends on the stage of disease.

Unfortunately, splenic hemangiosarcoma is a very aggressive cancer and long-term control/survival is difficult to achieve. Fortunately, there are treatment options available to help extend your pet's survival while maintaining their quality of life. Our main goal when treating your pet is to provide good quality time for all of you.