

Information for Oncology Clients

Hemangiosarcoma in Dogs

Comprehensive Cancer Care Service

Ryan Veterinary Hospital of the University of Pennsylvania

Hemangiosarcoma is a malignant cancer that originates from the cells that comprise blood vessels (endothelial cells). Some breeds of dogs, such as Golden Retrievers and German shepherds, are predisposed to developing this disease, and the most common sites of origin include the spleen, right auricle/atrium of the heart, and subcutaneous tissue below the skin. Unfortunately, hemangiosarcoma is a very aggressive type of cancer which tends to metastasize (spread) to intra-abdominal organs and the lungs, which makes the long-term prognosis poor for most dogs with this disease.

The standard of care for splenic hemangiosarcomas that have not yet metastasized to the lungs consists of surgery to remove the measurable (bulky or visible) disease followed by chemotherapy to delay the progression of metastatic disease. The average survival time with this combination of treatments is 4-6 months, versus about 2-3 months with surgery alone. For patients who do have distant metastasis to the lungs at the time of diagnosis, surgery may not be recommended, although chemotherapy may be an option to attempt to slow progression of metastatic disease and maintain a good quality of life.

Patients with primary cardiac hemangiosarcoma may be treated with surgery in some cases, but this may not always be possible depending on the tumor location and size. Chemotherapy may be attempted in these cases to slow disease progression. Survival times for patients with cardiac hemangiosarcoma range from 1-4 months.

The treatments and prognosis for patients with muscular and subcutaneous hemangiosarcoma are similar to that described above for splenic hemangiosarcoma. When surgical removal is not an option, palliative radiation therapy (administration of a few large doses of radiation therapy) can instead be considered to slow the growth of the tumor, in addition to chemotherapy.

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In addition to the standard treatment modalities described above, a commercially-available polysaccharopeptide extract from the *Coriolus versicolor* mushroom called I'm Yunity has shown benefit in treating patients with hemangiosarcoma. Studies involving this extract are currently ongoing at Penn Vet.

It is important that patients with any form of hemangiosarcoma be monitored by their owners at home for signs of hemorrhage (bleeding) that can occur as their cancer progresses over time. Signs of bleeding that should prompt immediate veterinary attention include: pale gums/mucous membranes, lethargy, collapse, and exercise intolerance.

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