

BACKGROUND

- ▶ Hemangiosarcoma is a highly metastatic malignancy occurring most commonly in the spleen.
- ▶ About 10% of dogs with hemangiosarcoma in the spleen also have a right atrial mass.
- ▶ Less frequently, hemangiosarcoma occurs in the skin, lungs, liver, or the retroperitoneum.

CLINICAL SIGNS

- ▶ Typical clinical signs include, weakness, collapse, abdominal distension and shock.
- ▶ Hemangiosarcoma may be asymptomatic and a splenic mass detected on routine physical examination.

DIAGNOSIS

- ▶ Ultrasound is used to identify splenic and right atrial masses. Radiographs should be performed to identify pulmonary metastasis. CBC and biochemical profile may demonstrate anemia, hypoproteinemia and thrombocytopenia. Coagulation is often abnormal in dogs with hemangiosarcoma. Dogs with coagulopathies may require blood and plasma transfusions.
- ▶ Histology is required to confirm a diagnosis of hemangiosarcoma but not all splenic masses are hemangiosarcoma. Ruptured splenic masses can be benign lesions, other sarcomas or lymphoma.

STAGING AND PROGNOSIS

Simplified splenic hemangiosarcoma staging system

TUMOR STAGE	TUMOR EXTENT	PROJECTED MEDIAN SURVIVAL TIME WITH SPLENECTOMY AND CHEMOTHERAPY*
1	Splenic mass, not ruptured	6-12 months
2	Ruptured splenic mass	2-6 months
3	Distant metastasis such as liver and lungs	1-2 months

TREATMENT

- ▶ Surgery is the most important treatment for hemangiosarcoma but location may preclude resection. Splenectomy controls hemorrhage and provides tumor tissue for histology. Chemotherapy with doxorubicin improves survival time. Currently available data does not support the use of Yunnan Baiyao and *Coriolus versicolor* as treatment for splenic hemangiosarcoma. Veterinary oncologists may offer clinical trials of new treatments for hemangiosarcoma.

PROGNOSIS

- ▶ Some locations may have a better prognosis than splenic hemangiosarcoma including those of the skin and retroperitoneum.
- ▶ Stage predicts survival with dogs at a higher stage having a shorter survival.

