

Hemangiosarcomas in the Dog

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Hemangiosarcoma in dogs is a malignant cancer that arises from the blood vessels.

Which dogs are at risk for developing hemangiosarcomas?

Hemangiosarcomas occur more commonly in older dogs. Hemangiosarcomas are rare in the cat and human. There are several breeds of dogs that seem to be at a greater risk for hemangiosarcoma and they include German Shepherds, Golden Retrievers, and Boxers.

Where in the body do hemangiosarcomas occur?

Although they can theoretically occur anywhere in the body, in dogs, hemangiosarcomas generally occur in these locations:

- Skin
- Subcutaneous tissues
- Spleen
- Heart

Hemangiosarcomas of the skin

What are the symptoms of hemangiosarcomas of the skin?

A hemangiosarcoma of the skin usually appears as a red or black raised growth. Some hemangiosarcomas of the skin are associated with exposure to the sun so most commonly occur on areas of the body with sparse fur, such as the abdomen, or in areas of short white fur. Other hemangiosarcomas of the skin in dogs can be metastasis from other tumors. The only way to positively identify a skin or subcutaneous tumor as a hemangiosarcoma is by histopathology (examining the removed tissue under the microscope).

How are hemangiosarcomas of the skin treated?

These tumors need to be surgically removed. A wide margin of normal tissue around the tumor is also removed to be sure all cancerous cells are eliminated. If the tumor has not spread below the skin, the prognosis is favorable, and chemotherapy may not be recommended. The earlier the tumor can be removed after it is detected, the better the prognosis.

What are the symptoms of subcutaneous hemangiosarcomas?

The subcutaneous form of hemangiosarcomas in dogs occurs as a lump under the skin, with the overlying skin appearing normal.

How are subcutaneous hemangiosarcomas treated?

The tumor, with wide margins, is surgically removed. Chemotherapy is recommended, as well.

Because hemangiosarcomas can swiftly spread, it is recommended that chest radiographs (x-rays) and ultrasound examinations of the chest and abdomen be performed to look for other tumors.

Approximately 2/3 of subcutaneous hemangiosarcomas metastasize.

Hemangiosarcomas of the spleen (splenic hemangiosarcomas)

What are the symptoms of splenic hemangiosarcomas in dogs?

A hemangiosarcoma of the spleen can often be detected through palpation. Commonly, the first symptoms are related to sudden blood loss into the abdomen when the fragile tumor ruptures. These symptoms would include weakness or collapse and pale mucous membranes. Occasionally, dogs will have symptoms of chronic blood loss, which include pale gums, irregular heart rate, and generalized weakness. Histopathology is necessary to accurately identify the tumor as a hemangiosarcoma.

How are hemangiosarcomas of the spleen treated?

Generally, the entire spleen is removed. If the tumor has ruptured, the surgery is considered an emergency. In addition, chemotherapy is recommended. Some newer therapies may be available at veterinary colleges. As with hemangiosarcomas of the skin, chest radiographs and ultrasound examinations of the chest and abdomen should be performed to look for other tumors. Approximately 1/4 of dogs with splenic hemangiosarcomas will also have a heart-based hemangiosarcoma. In general, dogs who only undergo splenectomy survive only about two months. Those who have chemotherapy as well, may survive for 6 months.

Heart-based hemangiosarcomas

What are the symptoms of heart-based hemangiosarcomas in dogs?



The first signs of heart-based hemangiosarcomas are often related to bleeding from the ruptured tumor. The blood that is released collects between the heart and a tough capsule that surrounds the heart called the pericardium. When the pericardium fills with blood, it puts pressure on the heart and the heart is unable to fill with blood and pump blood properly. Signs may include difficulty breathing, fainting, weakness, or sudden death. On radiographs of the chest, the heart will appear enlarged and round because the pericardium has filled with blood.

How are heart-based hemangiosarcomas treated?

As an emergency measure, a needle can be placed within the pericardium to draw off the blood and allow the heart to pump more efficiently. Surgical removal of the tumor can sometimes be possible, but survival time is generally only several months, and recovery from the surgery is often complicated. If chemotherapy is also used, survival time may be lengthened to up to 6 months.

Conclusion

In summary, hemangiosarcoma is a somewhat common tumor in dogs. Most of the tumors are metastatic and aggressive and the prognosis is poor. With early detection and treatment with surgery and chemotherapy, survival times and quality of life can be improved.