

Hemangiosarcoma: Cutaneous Form

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Cutaneous hemangiosarcomas are uncommon skin tumors in dogs and cats, accounting for approximately 2% of all skin tumors. Short haired, lightly pigmented breeds such as whippets, greyhounds, pointers and boxers are reported to be predisposed. In dogs, this skin cancer more commonly affects the limbs and trunk, while in cats, lesions are more common on the head, ears, armpit and groin regions.

Clinical Features

This skin cancer can be highly variable in its appearance. The “dermal” form, which arises from the skin itself, can appear as a hairless, thickened mass, raised or flat in appearance, dark red to blue black in color. Ulcerated lesions with hemorrhage are common. Size can vary widely and multiple tumors can occur simultaneously. “Subcutaneous” HSA are tumors that arise from underneath the skin surface, are less common, but can be larger, ill defined and carry a worse prognosis.

Another important feature of this cancer is the association with blood clotting abnormalities (“coagulopathies”). Patients with large, recurring or multifocal tumors can be more commonly affected with this problem.

Diagnostic Work Up

The initial diagnosis is typically achieved with biopsy and analysis of a tissue sample (histopathology). A key feature of this particular cancer is the determination as to whether the initial skin lesion identified as cutaneous HSA is actually the primary (initial) cancer, or if the lesion(s) represent secondary (metastatic) tumors from another location. This is sorted out by diagnostic tests including thoracic radiographs, abdominal ultrasound, a complete blood count, biochemistry profile and urinalysis. Additional tests such as cardiac ultrasound and coagulation testing (“clotting profile”) may be suggested based upon your pet’s history and physical examination findings. Occasionally, other imaging tests such as MRI scan may be helpful to determine the local invasiveness of the tumor and if surgery is feasible.

Treatment and Prognosis

If the above diagnostic staging tests are unremarkable, the treatment for intradermal HSA is wide surgical excision. If margins are complete, the prognosis is favorable. As some breeds are predisposed to this cancer, continued monitoring of the skin is recommended and suspicious lesions removed for biopsy. In some cases, preventative therapy with angiogenesis inhibition medication may be indicated.

Subcutaneous HSA are more difficult to treat. Although wide surgical excision is the treatment of choice, these tumors are more infiltrative into the surrounding tissue and can metastasize. Surgery to remove the primary lesion, followed by adjuvant therapy such as chemotherapy is generally the treatment of choice. Long term prognosis is more guarded for these patients due to the aggressive nature of this form of HSA.