AMC
Animal Medical Center
SINCE 1910

Title

Combination Chemotherapy and Immunotherapy for Dogs with Splenic Hemangiosarcoma

Purpose

Hemangiosarcoma (HSA) is the most common malignant splenic tumor of dogs. Primary splenic hemangiosarcoma is typically characterized by a highly malignant disease course. Dogs often have a vague history of possible clinical signs at home for days to weeks prior to a crisis. Tumor rupture is common, leading to hemoabdomen and the recommendation for an emergency splenectomy. Many dogs suffer from macroscopic metastasis at the time of initial evaluation and tumor spread to the liver, omentum, mesentery, and lungs is most common. Reported survival time is abbreviated with surgery alone at 1.6 months; the 1 year survival rate is only 10%. Chemotherapy in the adjuvant setting is aimed at combatting metastasis. Doxorubicin chemotherapy is the most efficacious agent. Chemotherapy modestly increases median survival time to 4-6 months.

Immunotherapy has emerged in human and veterinary oncology as a new approach to cancer therapy. In several human cancers, monocytes have been shown to play a role in cancerous metastasis. Recently, the metastatic lesions found in canine HSA where shown to have increased infiltration of monocytes. Immunotherapies aimed at preventing monocyte recruitment and/or mobilization may lead to prolonged survival times in this devastating disease by slowing metastasis. Lostartan is a well-tolerated drug in dogs primary used for hypertension. However, at high doses, losartan that has been shown to decrease monocyte activation and thus losartan maybe a potential antimonocyte, antimetastatic therapy for canine HSA.

The Cancer Institute at the Animal Medical Center is currently enrolling canine splenic HSA patients into a clinical trial. All patients will receive standard of care chemotherapy with doxorubicin. This study is a prospective, randomized, clinical trial with active control, intended to compare the effects of two drug therapies (doxorubicin paired with immunotherapy, vs. doxorubicin paired with placebo) on the progression free survival time of canine HSA patients after splenectomy. Progression free survival at the end of 4 months of doxorubicin chemotherapy will serve as the end point to this study. Morbidity and mortality will be compared between treatment groups.

Eligibility

Only the 40 dogs will be accepted for enrollment. To qualify, dogs must have a histopathologic diagnosis of splenic hemangiosarcoma. Biopsy reports of dogs to be considered for the study should be sent to the Animal Medical Center (Fax: 212-308-1017, Attn: Dr. Love or email directly to edwina.love@amcny.org) as soon as possible. Study patients will get prioritized appointments, with a goal of initial consult within 7 days of surgery. All enrolled dogs will have free clinical staging (thoracic radiographs and abdominal ultrasound) at the completion of the study as well as 75% of the total cost of chemotherapy visits. Dogs will be excluded if they have been treated with prior chemotherapeutics for HSA or suffer from any other malignancies.

If you have a patient who you would like to enroll, or if you are interested in learning more, please contact Dr. Edwina Love (edwina.love@amcny.org) or Dr. Ann Hohenhaus (ann.hohenhaus@amcny.org).