

CANINE LYMPHOMA

The term “**lymphoma**” is a generic description for cancers that arise from lymphocytes, cells responsible for immune function. Together, the tumors that make up the different types of lymphoma are among the most common cancers diagnosed in dogs, accounting for as many as ¼ to 1/5 of all malignancies. While the diagnosis of lymphoma as a general entity can be relatively straight forward, telling the different forms of lymphoma apart can be challenging.

Part of the difference relates to where the tumor is located: the most common anatomic form of lymphoma is called “multicentric” because by the time it is diagnosed, the lymphoma has spread to virtually every lymph node (lymph gland) in the body, with prominent enlargement of lymph nodes that can be seen or felt under the neck, in front of the shoulders, or behind the knee. Sometimes, lymphoma affects lymph nodes that are not visible or palpable from outside the body, such as those inside the chest or in the abdomen. In these cases, dogs may accumulate fluid in the chest that makes breathing difficult, or they may have digestive problems (diarrhea, vomiting, or painful abdomen).

Lymphoma also can be restricted to specific organs (for example, the intestine, the kidney, the liver, the bone marrow, and the brain, among others). The anatomic location is important to “stage” the disease, a process that involves a series of diagnostic procedures that are used to determine its extent and prognosis, and which then relate to treatment options. The other important aspects used to classify lymphoma relate to the microscopic appearance of the cells and their molecular composition (called “phenotype”). Determination of these features requires a tissue biopsy, and until recently, it has been applied erratically in veterinary practice. We now recognize that these features provide valuable information to determine prognosis and to guide therapy.

The most common type of lymphoma seen in dogs is called “diffuse large B cell lymphoma.” If left untreated, dogs with this type of lymphoma will generally succumb to the disease within 3 to 4 weeks. Durable remissions (approximately one year on average) are achievable using the standard-of-care, multi-agent chemotherapy. Most dogs tolerate chemotherapy remarkably well, and are able to function normally and maintain a very high quality of life; and unlike humans, most dogs receiving chemotherapy do not lose their hair. Notable exceptions are breeds of dogs with continuously growing hair coats such as Poodles, Old English Sheepdogs, and Bichon Frise. Treatment with prednisone (a corticosteroid) alone can induce short-lived remissions, usually less than 8 to 12 weeks. Unfortunately, this approach frequently renders the disease resistant to further treatment. Other types of lymphoma are quite different from diffuse large B cell lymphoma, so the anticipated survival may be longer, they may respond better to other treatment regimens, or they may respond poorly, if at all to any available therapy. Ultimately, many factors must be considered to accurately diagnose, prognosticate, and determine the best treatment plan for a dog with lymphoma, recognizing that each case is unique. Generally, the best approach is achieved when the family, the primary care veterinarian, and specialists involved in an affected dog’s care work together as a team to determine the best option for each specific case.

The **AKC Canine Health Foundation** has funded 27 grants valued at more than \$1.7 million dealing with more effective treatments and the genetics of lymphoma. It is with this research that in the future there may possibly be a way to prevent or cure this cancer that affects the entire canine community. If you would like additional information about the active research the CHF has funded on Lymphoma, visit our website at www.akcchf.org and click on “Research.”

You can help by providing financial support to the Canine Health Foundation’s efforts (visit www.akcchf.org to make a secure online donation).

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