

Lymphoma in Dogs

Client Handout

Lymphoma (lymphosarcoma) is a cancerous condition arising from the lymphatic system. Lymphatics are located throughout the body in almost every tissue type and provide drainage from proteins and molecules that cannot directly enter the bloodstream. Therefore almost any tissue type can be affected such as lymph nodes, spleen, liver, mediastinum (chest), brain, eyes, spinal cord and intestinal tract. Lymphoma can be found in one or two sites but more commonly widespread to lymph glands and internal organs. Middle age to older dogs are primarily affected however disease can occur in dogs of any age. There is no known breed predisposition but higher numbers have been reported in boxers, rottweilers and golden retrievers.

Symptoms or clinical signs will vary with the location of lymphoma. Often times the only abnormality on exam is general lymph node enlargement in an otherwise healthy animal. Other general signs can include anorexia (lack or loss of appetite or food), weight loss and fatigue. Vomiting and diarrhea is usually seen with gastrointestinal forms, coughing or difficulty breathing with mediastinal (chest) forms. If increased blood calcium levels are present animals may exhibit increased thirst.

A number of diagnostic tests can be used to diagnose lymphoma from bloodwork and urinalysis to radiology and ultrasound. Enlarged lymph nodes are gently probed with a needle (fine needle aspirate) to obtain cells for cytology. Often times a surgical biopsy is necessary if results are inconclusive on the aspirate. If lymphoma is suspected within the chest or abdomen a tissue sample from the affected organ can be obtained with an ultrasound guided needle aspirate or surgical biopsy. The most common biochemical blood abnormality is increased calcium. If left untreated the high calcium levels can potentially cause kidney failure.

Chemotherapy is the treatment of choice for lymphoma. Because lymphoma is most commonly a multiorgan disease, surgical excision of the lymph nodes is not curative. Once cytology results are obtained your veterinarian will discuss the various chemotherapy protocols available to treat your dog's lymphoma.

Goals of chemotherapy are to provide a good quality of life for your pet with minimal side effects. Success will vary with the drug types used and the severity of disease. With treatment, approximately 75% of dogs are expected to achieve remission for an average of 12-18 months depending upon the protocol and pet's response. The second remission is more difficult and results are variable. Without treatment average survival is 4-6 weeks from the time of diagnosis.

Higher success rates are usually achieved with multiple drug therapy. However, this has been associated with more side effects and is usually more expensive. Some of the more common side effects can include vomiting and diarrhea, loss of appetite, white blood cell suppression, and impaired heart function. In comparison to human chemotherapy, veterinarians tend to use lower doses and dramatic side effects occur less frequently. Although the potential for side effects exists, many animals complete therapy with minimal side effects and good quality of life. However, lymphoma is a terminal disease even with chemotherapy. Often times pet owners will be confronted with the decision of euthanasia based on declining quality of life or poor response to chemotherapy drugs.