

# ANIMAL MATTERS: Tips & Treatments



Michigan Veterinary  
Specialists<sup>sm</sup>

www.michvet.com

## ONCOLOGY:

### Lymphoma

#### Background

Lymphoma is one of the most common neoplasms in the dog, accounting for approximately 7%-24% of all canine neoplasia and 83% of hematopoietic neoplasia.<sup>1,2</sup> The etiology is largely unknown and likely involves multiple factors. Median age is approximately 6-9 years and gender does not appear to be an important risk factor.<sup>3,4,5</sup> Breeds reported to have a higher incidence include Boxers, Bull Mastiffs, Basset Hounds, Saint Bernards, Scottish Terriers, Airedales and Bulldogs.<sup>6,7</sup> Dachshunds and Pomeranians have been reported to have a lower risk.<sup>6,7</sup> The most common anatomic forms of lymphoma in decreasing prevalence are multicentric, craniomediastinal, gastrointestinal and cutaneous forms.<sup>8</sup>

#### Clinical Signs

The clinical signs associated with canine lymphoma are variable and depend on the extent and location of the tumor. Approximately 80% of dogs will be diagnosed with the multicentric form and present with generalized painless peripheral lymphadenopathy.<sup>8</sup>

#### Diagnosis

Simple fine needle aspiration is typically enough to confirm a diagnosis, however, in order to classify the lymphoma as low, intermediate or high grade, histopathology is typically required. It is best to perform aspirates on the prescapular and popliteal lymph nodes and avoid areas of high reactivity such as the submandibular lymph nodes. Additionally, lymphoid cells are fragile and only gentle pressure should be applied while spreading the sample on a slide. Using the non-swabbed end of a q-tip to remove the sample from the hub of the needle and gently rolling it on a slide helps preserve cellular architecture.

#### Stages

Stage I – Involvement limited to a single node or lymphoid tissue in a single organ  
Stage II – Involvement of many lymph nodes in a regional area (often designated as cranial or caudal to the diaphragm)  
Stage III – Generalized lymph node involvement  
Stage IV – Liver and/or spleen involvement  
Stage V – Manifestation in the blood and involvement of bone marrow and/or other organ systems.  
Substage a – No clinical signs  
Substage b – Clinical signs present

## Treatment

Lymphoma is overwhelmingly considered a systemic disease that responds best to combination chemotherapy protocols. Complete remissions can be achieved in 60% - 90% of dogs, with median survival times of about 6-12 months depending on the protocol used.<sup>8</sup> Dogs tolerate chemotherapy extremely well. Mild and self-limiting gastrointestinal upset is possible about 3-5 days post therapy and myelosuppression is possible about 7-10 days post therapy. It is rare that side effects are severe enough to require hospitalization for supportive care.

## Board Certified Oncologist:

Eric Bulakowski, DVM,

DACVIM

Christine Swanson, BS, DVM

MVS offers full-time oncology service at BOTH HOSPITALS and our oncologists serve as an extension of your practice. Our clinicians have years of specialized training and experience. Please let us know how we can help you and your clients.

## Questions?

Our oncologists are available for questions and consultations on medical conditions. They are also on-call for consultation on cases seen through the emergency service 24/7.

## LOCATIONS

3412 East Walton Boulevard  
Auburn Hills, MI 48326  
Ph. (248) 371-3713

29080 Inkster Road  
Southfield, MI 48076  
Ph. (248) 354-6660