

Lymphoma in Cats

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Lymphoma, also known as lymphosarcoma (LSA) is a common cancer in cats. It is a cancer of the lymphocytes, which are cells that normally function in the immune system, and are found throughout the body. Feline lymphoma is usually treated with chemotherapy which, depending on the location and form of lymphoma, can be very successful with high remission rates and a significantly increased life span.

Which cats are at risk for developing feline lymphoma?

Feline lymphoma is much more common in cats who are infected with [feline leukemia virus \(FeLV\)](#). The risk of an FeLV-infected cat developing lymphoma is 60 times that of an uninfected cat. Infection with [feline immunodeficiency virus \(FIV\)](#) also increases the risk of developing lymphoma, but less so than FeLV.

What are the symptoms of lymphoma in cats?

Feline lymphoma has multiple forms. Because lymphocytes and lymph tissue are found throughout the body, lymphoma can appear almost anywhere and affect a wide number of organs. The location is often associated with the cause of the lymphoma and influences the symptoms, treatment, and prognosis.

Anatomic Site	Age	FeLV Status	Symptoms
Multicentric (multiple organs affected)	Middle-older age	Usually (-)	Vary with organ(s) affected
Alimentary (digestive tract)	Middle-older (avg 8 yrs) age	Usually (-)	Loss of appetite, weight loss, vomiting, diarrhea
Mediastinal (lymph nodes in the chest)	Young (avg 2-3 yrs) age	Usually (+)	Rapid breathing, difficulty breathing
Renal (kidney)	Middle age	May be (+)	Loss of appetite, depression, increased thirst and urination
Spinal	Young-middle age	Usually (+)	Hindlimb weakness and paralysis
Nasal	Middle-older age	Usually (-)	Nasal discharge, nose bleeds, facial swelling, sneezing

How is lymphoma in cats diagnosed?

Diagnosis of lymphoma in cats is based on results of a physical examination and microscopic examination of biopsies or cells taken from affected tissues. This will not only confirm the diagnosis, but help to determine how aggressive the cancer may be, and provide a basis for treatment and prognosis. A [complete blood count](#), [serum chemistry](#), [urinalysis](#), [radiographs \(X-rays\)](#), and/or [ultrasound](#) examinations are generally performed to assess the health of the cat and determine which organ systems may be involved. Testing for FeLV and FIV may reveal that a cat is positive for one or both of these diseases, which will affect the prognosis. A PCR for Antigen Receptor Rearrangement (PARR) test can help differentiate lymphoma from other diseases. Examination of samples taken from the bone marrow may also be indicated in some cases.

How is lymphoma in cats treated?

Treatment for feline lymphoma usually consists of chemotherapy. In almost all cases a combination of different drugs is given over the course of many weeks. These drugs may include chlorambucil, doxorubicin, cyclophosphamide, vincristine, L-asparaginase and [prednisolone or prednisone](#). In some cases, such as cats with nasal lymphoma, radiation therapy may also be used. In general, cats tolerate chemotherapy very well. If side effects become severe, the treatment protocol can be modified to decrease the effects.

What is the prognosis for a cat with lymphoma?

The remission and survival rates of cats with lymphoma vary depending on the cat's FeLV status, the location of the tumor(s) and how quickly the tumor is diagnosed and treated. In general, about 55-70% of cats will have a complete remission for 20-30 months. Cats that are infected with FeLV or FIV have a lower rate of response to therapy as well as a shorter average survival time when treated.

Conclusion

Feline lymphoma is a fairly common cancer of cats. In the past it was closely linked to infection with FeLV but, with a decrease in the incidence of feline leukemia, more cats with lymphoma are FeLV negative. Feline lymphoma can strike a variety of different organs but always involves a proliferation of lymphoid cells. About 55-70% of infected cats respond favorably to chemotherapy treatment and a fair number can see an increased life span of two years or more. Because of the close link to infection with FeLV and FIV, one of the best things owners can do to reduce the risk of their cats developing lymphoma is to protect them against infection with FeLV and FIV. Eliminating exposure to other cats is the best preventive. If your cat is exposed to other cats (e.g., goes outside, to cat shows, etc.) consider FeLV vaccination.