

# FELINE LYMPHOMA



## What is lymphoma in cats?

Lymphoma is a cancer of a type of white blood cell called a lymphocyte. Lymphocytes are found throughout the body – both in the bloodstream and in various tissues and they act to fight infection. Lymphoma can develop when lymphocytes grow and divide in an uncontrolled fashion and invade normal tissues preventing them from functioning normally. In cats, the most common type of lymphoma affects the guts (alimentary/gastrointestinal lymphoma), but other tissues such as the liver, spleen, intestines, kidneys, bone marrow can also be involved. There are different types of feline alimentary lymphoma, the most common type is called low-grade alimentary lymphoma (LGAL) while intermediate-/high-grade alimentary lymphoma (I/HGAL) and large granular lymphoma (LGL) are rarer. Other less common forms of lymphoma in cats include: mediastinal lymphoma (chest), peripheral nodal lymphoma which involves the external lymph nodes (glands) and so-called 'extranodal lymphoma' (e.g. disease affecting the nose, eye, kidney or skin). Lymphoma can be high or low grade, which tells us how aggressively it will behave.

## Symptoms

Most cats with lymphoma commonly have symptoms such as lethargy, reduced appetite, weight loss and vomiting/diarrhoea. Enlarged lymph nodes are less commonly found. These signs in cats are not specific to lymphoma and could be due to many other diseases. The exact symptoms depend on where in the body the lymphoma is. They can be very variable depending on what organs or tissues are affected. For example: lymphoma in the chest can cause a cough or breathlessness while renal lymphoma can cause pain and blood in the urine together with excessive drinking and urination.

## Causes

The cause of feline lymphoma is largely unknown and likely multifactorial; however, investigations are currently shedding significant light on the subject. Older domestic short hair and Siamese cats seem to have a higher risk of developing the disease. We also know that exposure to two viruses (the feline immunodeficiency virus and the feline leukaemia virus) increases the risk of developing lymphoma.



## Diagnosis

The main way to diagnose lymphoma in cats is to take a sample from the affected part of the body. To allow evaluation of internal lymph nodes and organs, patients usually have an ultrasound scan together with needle biopsies. This is a simple procedure using a small needle to collect cells. The procedure is quick and can be carried out with mild sedation in most cases. However, in some cases, fine needle aspirates are often not sufficient to reach a definitive diagnosis of lymphoma so we might also need to take a bigger biopsy under general anaesthesia. Biopsies might be required especially

in cases like lymphoma of the nose or other forms of localised lymphoma that fine needle aspirates cannot be easily performed. Depending on the location of the abnormal tissue surgery might also be required.

Some cats may have a CT scan, particularly if the lymphoma is affecting the head or chest. On some occasions, we may recommend samples of the bone marrow to investigate whether cancer cells are present in this location. This procedure is carried out under a short general anaesthetic. Blood sampling is also performed to assess a patient's general health status and to check for any sign of lymphoma in the bloodstream.

Providing the patient is well and clinically stable all these tests are done on an outpatient basis and the results are usually available within a few days for the fine needle aspirates and 10-14 days for any tissue biopsy results. The oncology clinician will guide you as to what the best combination of tests is.

## Treatment



The aim of chemotherapy is quality of life over quantity. Most cats undergoing chemotherapy for lymphoma experience a normal quality of life. Chemotherapy is the treatment of choice for lymphoma in cats because the cancerous cells can spread throughout the body. The goal is to induce "remission" by killing the cancer cells. "Remission" means that there is no visible evidence of the lymphoma. However, it is likely that some cancer cells will still survive and eventually these cells grow and the lymphoma will become evident again ("relapse").

The choice of the protocol depends on the grade of the lymphoma. Low-grade lymphoma is usually treated at home with a tablet-based protocol on a long-term basis. In this case, patients require a blood test and physical examination once every month. Cats with high-grade lymphoma are treated with a more intensive protocol involving injections of chemotherapy at the hospital. A blood test is performed before each treatment to check the blood cell count to make sure it is safe to

administer chemotherapy. Each appointment usually takes around a few hours and the patient can go home on the same day. Your oncologist will discuss which protocol is most suitable for your cat's lymphoma.

Chemotherapy agents can be excreted in the urine and faeces, and care must be taken when handling your cat's waste. You will be advised of appropriate precautions, and it is important to note explicitly that pregnant women should avoid contact with the cat's waste following chemotherapy.

In cases where there is a localised form of lymphoma (nose, brain, spinal cord etc), radiotherapy either alone or in combination with chemotherapy might be the preferred option.

## Outcome

In cats, it is very uncommon to cure lymphoma. The treatment aims to make your cat feel better for as long as possible with minimum side effects. Survival times for cats with lymphoma are variable and depend on the grade of the disease and the initial response to treatment.

Cats with low-grade lymphoma can live with the disease for a long time, sometimes several years. Cats with high-grade disease can have shorter survival times for chemotherapy, although we can still achieve good disease-free periods for certain lymphoma types. Your oncologist should be able to give you more information depending on the type and grade of your cat's lymphoma.

## Complications

Side effects are rare and on very rare occasions may require hospitalisation. Cats tolerate chemotherapy generally very well and we do not see the same problems that are experienced in people. Most side effects are managed at home with symptomatic treatment and usually resolve within a few days. The main side effects of chemotherapy are:

- + **Gastrointestinal:** mild vomiting, diarrhoea and inappetence can be seen. We use anti-nausea medication to prevent this as much as possible
- + **Bone marrow suppression:** chemotherapy can reduce the white cell count, and we perform regular blood tests to monitor for this. A low white cell count can increase the body's susceptibility to infection which in very rare occasions might be life-threatening (sepsis)
- + **Hair loss:** some cats will lose hair after a few months of treatment – this usually causes a thin hair coat rather than complete baldness. Cats will also often lose their whiskers, although these will grow back once chemotherapy has finished.
- + For side effects associated with radiotherapy please refer to our separate leaflet

Please monitor your pet closely after each treatment and telephone us if you feel your pet seems ill or if you have any questions or concerns (01268 564664).

## What happens when treatment is finished or if the lymphoma comes back?

Once the treatment is completed the clinician will discuss follow-up appointments for monitoring. These can be done either with us or your local practice if more convenient. Initially, we usually advise monitoring every month for the first two months and then reducing the frequency to every three months until relapse occurs (the lymphoma comes back). Monitoring usually involves a physical examination performed by a veterinary surgeon. Blood tests and scans are only performed if lymphoma relapse is suspected.

If and when the lymphoma relapses we usually advise rescue chemotherapy which involves using the same protocol unless relapse occurred during treatment, or within one month after completing treatment. If this occurs, we would switch to a different chemotherapy protocol.

If you have any further questions please do not hesitate to contact the hospital.



Visit us:  
[southfields.co.uk](https://southfields.co.uk)

**Southfields**  
veterinary specialists

PART OF  
**LINNAEUS**