



FELINE LEUKAEMIA VIRUS (FeLV) IN CATS.

FeLV is one of the most common and important infectious diseases of cats, and is found world-wide

What Causes It?

FeLV belongs to a group of viruses that can cause the development of cancerous tumours in infected cats. Cats infected with FeLV can develop lymphoma, a solid tumour of lymphocytes (a type of white blood cell), leukaemia, cancer of the bone marrow and other types tumours.

Other major effects of FeLV infection are severe suppression of the immune system and development of anaemia. More cats will die from these complications than from development of tumours.

FeLV only causes disease in cats.

How is it Transmitted?

Cats are most commonly infected orally, by ingestion of the virus. An infected cat, will shed large quantities of the virus in the saliva, and in faeces, urine and milk.

It is thought that infection is perhaps spread most commonly through prolonged social contact (mutual grooming, sharing of food bowls, litter trays etc., where virus may be ingested).

However, the virus can also be transmitted through biting and if an entire queen is infected with FeLV, any kittens she produces will also be infected (although many die or are aborted before birth).

The virus is fragile and does not survive in the environment for any length of time

Which Cats Are At Risk?

In general, less than 1-2% of healthy pet cats are infected with FeLV, however the infection is found more commonly in sick or outdoor cats, and it is slightly more common in males.

Signs and Symptoms.

- suppression of the immune system. This accounts for around 50% of all FeLV-related disease and can result in the development of secondary diseases and infections.
- anaemia - FeLV-related anaemia accounts for around 25% of all FeLV-related disease
- development of tumours - most commonly lymphoma or various leukaemias. This accounts for around 15% of FeLV-related disease. A FeLV-infected cat is approximately 50 times more likely to develop lymphoma than a non-infected cat.
- other diseases - a variety of other diseases including skin disease and failure of the reproductive system can affect some infected cats.

The type of disease that develops in an individual cat infected with FeLV is partly decided by the strain of virus that infected the cat. At least four different strains of FeLV are recognised.

Because suppression of the immune system is the biggest cause of signs and symptoms in FeLV infected cats, a variety of chronic or recurrent diseases can develop. This will result in a progressive deterioration in their health over time.

Clinical signs are extremely diverse but include:-

- fever
- lethargy
- poor appetite
- weight loss
- persistent
- recurrent respiratory, skin and intestinal problems.

Diagnosis

Good diagnostic tests are readily available for FeLV. Simple blood tests are used by many vets and these tests are quick, relatively inexpensive, and

generally very reliable. These blood tests will often include identification of FIV, as many of the clinical signs of FIV infection are similar to FeLV infection.

Occasionally there might be a false positive or negative result and if this is an unexpected a repeat test is usually performed. Virus isolation - this test detects the virus itself within the blood sample through laboratory culture of the virus

Re-testing is sometimes required after 12-16 weeks to confirm the initial result. If the cat had only recently been exposed, before the initial test, it could have tested negative. Conversely, if a cat had only recently been infected, it could have tested positive, and then been able to eliminate infection, itself, without treatment.

Treatment

There is no cure for FeLV infection, and generally, treatment is based on controlling the symptoms. This would include:-

- Prompt diagnosis and treatment of secondary infections - more prolonged treatment could be necessary because suppression of the immune system would result in a slower response than normal.
- Good quality nutrition is necessary and avoiding foods that could carry a health risk
- Infected cats should be kept indoors to reduce their exposure to other infections.
- In some cases, blood transfusions and drugs to manage anaemia are necessary.
- Chemotherapy might also be used to manage FeLV-associated lymphomas. Although FeLV infection, often has a sad outcome, some cases do respond to treatment.

Prevention.

The development of effective vaccines and simple and inexpensive tests, to identify infected cats, have significantly reduced the frequency of Feline Leukaemia cases, although it remains a significant disease.

Although there is no cure for feline leukaemia, the disease is easily preventable:-

- ideally keeping a cat indoors, restricts exposure to other cats, that might be infected
- the cat's living environment and all equipment such as food bowls, litter trays and bedding etc should be thoroughly and regularly cleaned.
- the cat's vaccinations are up to date.
- the cat should have regular worming and flea treatments
- any cat that tests positive for FeLV should be isolated from other cats to prevent transmission.

Prevention is covered fully in the "**PREVENTION OF DISEASES IN CATS**" section above