

Feline Leukaemia - the veterinary nurse's role

(By Fiona Burke-Linnane, RVN, Glenina Veterinary Clinic, Galway)

Feline Leukaemia (FeLV) is an oncovirus (tumour inducing virus) belonging to the retroviridae family. It is a species specific complex disease that can manifest in different ways. Symptoms that may be associated with FeLV at different stages include weight loss, kidney infections, gingivitis, gastrointestinal problems, skin infections, reproductive problems, anaemia, anorexia and lethargy.

Possible outcomes of FeLV infection:-

- A) The cat may recover without any further complications
- B) The virus may lay dormant but can appear when the cat gets stressed or ill.
- c) Full progression of the disease causes suppression of the immune system and or tumours, thereby leaving the cat at risk to secondary infections. Euthanasia is often the only option in such cases to prevent the cat suffering unduly.

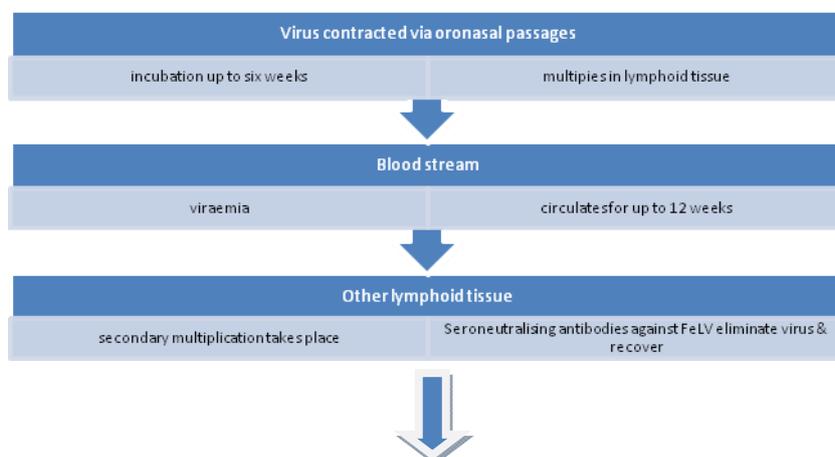
The Veterinary Nurse has an important role to play in discussing this complicated disease, diagnosis, control in multi-cat households and options with the owners.

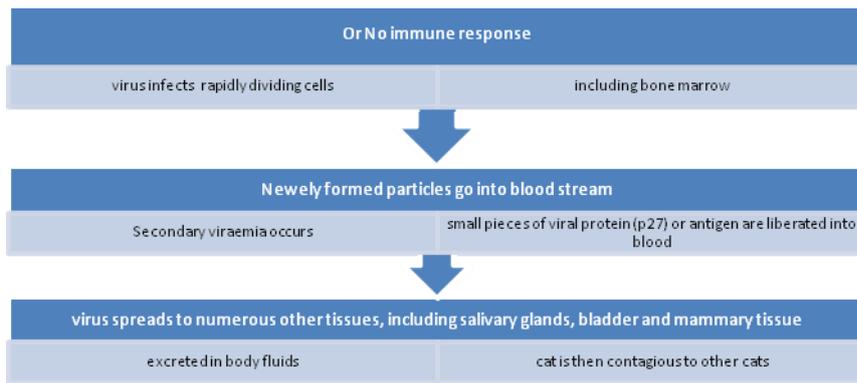
How does a cat become infected?

The spread of FeLV varies by region and also by lifestyle. In general, FeLV is detected most frequently in younger, free-wandering, mixed breed cats. The virus can be transmitted either in the uterus or through secretions and excretions. The virus is transmitted in saliva, blood, urine and faeces therefore FeLV is mainly a concern for cats that are in contact with other cats i.e. grooming, fighting and contaminated food and water bowls .It is known that the virus may survive for around 48 hours outside of the host i.e. the infected cat.

Adult cats are less likely to become continually infected than young kittens as animals become more resistant to infection with age. Cats that are exposed to the virus and then get better are generally immune and are resistant to further infection

The course of infection of FeLV



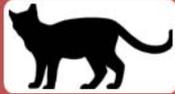


Diagnosis

Chronic FeLV infection results in the continuous presence in the blood of infectious virus and soluble viral antigens, which can be detected by a variety of test systems. These include “In house” test kits as well as tests that are used in specialist laboratories. In house tests for FeLV detect viral p27 antigen, the major viral centre protein. They are a basic diagnostic test for screening cats that present characteristic symptoms and should be carried out regularly during annual check-ups. Further in depth diagnosis that may be performed are haematological and chemistry profiles, urine analysis, thyroid profile, radiography and ultrasound. The combination of routine screening and confirmatory tests will accurately determine the FeLV infection status of most cats.

Test protocols:

In practice FeLV test

- 
•Antigen negative – cat is negative from FeLV
- 
•Antigen positive – retest using a confirmatory test used in specialist laboratory
- 
•Antigen positive – confirmatory test is negative, retest after 12 weeks to confirm the status.

Prevention

As FeLV is unstable in the environment it may be killed using most disinfectants, therefore routine cleaning procedures of bedding, housing litter trays and dishes will prevent transmission of the virus. In practice surgical, dental instruments, endotracheal tubes and other items that may be potentially contaminated with body fluids should be carefully cleaned and sterilised between uses.

FeLV can be distributed via the blood; therefore, all feline blood donors should be confirmed to be free from infection before donating blood. FeLV is not an airborne disease, so infection from one cat to another across kennels is unlikely.

Owners can aid in the control of infection by good husbandry and isolating FeLV positive cats in multi-cat households (all cats should be tested). The ideal method of control is routine vaccination against FeLV and the veterinary nurse also plays an important role in educating the owner and explaining the significance of vaccination.

Negative and positive cats can be kept apart to avoid further spread of infection. Initially positive cats should be tested 12 weeks later to establish if they have eliminated the infection or if further investigation is warranted.

Health care and supportive therapy for FeLV infected cats

Decisions relating to treatment of FeLV- positive cats are not simple as it is such a complex disease. Cats that are infected with FeLV should be closely monitored and receive veterinary health examinations regularly for any changes in their health status. Early detection of secondary illnesses is essential for more successful treatment outcomes. Infected entire cats that are not showing clinical signs should be neutered to reduce stress associated with oestrus and mating behaviours. Routine parasite control is also valuable to reduce potential gastrointestinal problems.

Dealing with feline leukaemia cases is a very challenging duty for the veterinary nurse in practice. It requires a good understanding of the disease and many support meetings with owners to help them fully understand this life- threatening illness. We can help make a difference by providing information to help reduce the occurrence of FeLV and also endeavour to care for and make comfortable the unfortunate infected cat.

Contact Glenina Vet Clinic today on 091-752014