

Feline Leukemia

FeLV, a retrovirus, is the most important infectious disease agent producing fatal illness in domestic cats today.

The feline leukemia virus is excreted in saliva and tears and possibly the urine and feces of infected cats. Prolonged, extensive cat-to-cat contact is required for efficient spread, because the virus is rapidly inactivated by warmth and drying.

A cat with FeLV disease may live for several weeks to several months, depending on how advanced the disease is at the time of diagnosis. However, it is impossible to tell how long any particular cat will survive.

A significant percentage of adult cats that are exposed to the virus develop immunity and do not become persistently viremic (i.e., will not carry the virus indefinitely in the blood and bone marrow). Usually those cats live out a normal life span. However, in some the virus may remain sequestered for a variable period of time somewhere in the body. It is thus conceivable that FeLV might break out and cause disease at a later date, after the cats have been stressed, or perhaps medicated with drugs that suppress the immune system.

Common clinical signs produced by FeLV include anemia, jaundice, depression, weight loss, decreased appetite, diarrhea or constipation, blood in the stool, enlarged lymph nodes, respiratory distress, decreased stamina, excessive drinking and urination, fetal resorption, abortion, infertility, birth of "fading" kittens, and a syndrome resembling panleukopenia ("cat distemper"). FeLV also interferes with the cat's natural ability to ward off infectious disease agents, so that almost any severe, chronic illness may lead your veterinarian to suspect FeLV. Cancer occurs in some FeLV-infected cats. In those cats the tumor masses may cause such problems as respiratory distress; intestinal inflammation with diarrhea, vomiting or constipation; liver or kidney disease; cloudy eyes; and neurologic abnormalities.

To date there is no cure for FeLV infection or disease. A variety of chemotherapeutic regimens have been developed, and in certain cases those regimens can produce a temporary remission, depending on the physical condition of the cat and the type of disease that is present. Those drug therapies may allow the cat to continue in a reasonably healthy state for a period of several weeks to several months. However, it must be understood that those are only remissions and not permanent cures. Chemotherapeutic drugs are very potent, and their effects must be monitored carefully, to avoid overdosing the patient. Various antiviral compounds including interferon may also be used to treat cats with FeLV infection. Those compounds, while still experimental, are generally safer to use than chemotherapeutic agents, and may reduce the amount of virus present in the blood of the cat, and may extend the period of remission of clinical disease. As yet, antiviral compounds do not produce permanent cures for FeLV infection or disease.

Therapy with a steroid (such as prednisolone) acts to decrease the numbers of some circulating white blood cells (lymphocytes). A cat with leukemia may have an increased number of abnormal (cancerous) lymphocytes circulating in its bloodstream; therefore steroid treatment may help to destroy them. Prednisolone may also act directly against the cells of some solid tumors (such as lymphosarcoma) that are caused by FeLV. Steroids also inhibit the cells that are normally responsible for destroying senescent red blood cells; that effect may help to combat the anemia and excessive red blood cell destruction that often accompany FeLV. It is important to remember that because steroids and FeLV both suppress the immune system, an FeLV-positive cat undergoing steroid therapy is especially vulnerable to other infections.

Several vaccines are available to aid in the protection of your cat against FeLV infection. The vaccines are produced by various methods, and either contain the inactivated ("killed") whole virus, or a subunit protein of the virus. The principle of protection is the same for each of these vaccines.