

Feline Immunodeficiency Virus

Lynn F. Guptill, DVM, PhD, DACVIM (Small Animal)

BASIC INFORMATION

Description

Feline immunodeficiency virus (FIV) can cause a permanent infection that eventually leads to diminished function of the immune system and various associated clinical conditions.

Cause

The virus can infect any cat. It is spread by close contact (most often via bite wounds) and from mother to kittens across the placenta. It may also be spread by blood transfusions or by equipment that is contaminated with infected blood or other body fluids. The virus is shed in most body fluids.

The virus is susceptible to drying, sunlight, disinfectants, and detergents, and it does not survive well in the environment. It can sometimes persist long enough in shared food and water bowls, litter boxes, and on other items to be transmitted to other cats.

Clinical Signs

Signs are quite variable. Fever, enlarged lymph nodes (glands), and lethargy may occur soon after infection, but may be so mild that they are not noticed. Cats then enter a prolonged asymptomatic phase of infection that may last from months to years. The final phase of infection occurs when cats are severely immune deficient, and during this phase secondary infections and other conditions may be seen.

Signs that may occur include intermittent fever, lethargy, and infections of the mouth (gingivitis and stomatitis). Neurologic signs, such as a wobbly gait (ataxia), altered mental awareness, and seizures (rare) may be seen. Inflammation in the eyes (uveitis) and various cancers may develop. When a sick cat is diagnosed with FIV infection, it may be difficult to determine whether the presenting problem is caused by FIV or by some other disease.

Diagnostic Tests

Because cats can be asymptomatic shedders of virus and transmit the infection to other cats, it is commonly recommended that cats be tested for FIV at some point in their lives. Testing may occur when cats are acquired as a new pet; when they are exposed to an infected cat; when they are potentially exposed after escaping from the house or being allowed to roam outside; or when they are ill. Testing is also done prior to vaccination against FIV.

Routine laboratory tests and x-rays are often recommended to investigate the clinical signs. Further testing depends on what

organ systems are involved. Any results or signs that indicate an abnormal immune system may prompt testing for FIV and feline leukemia virus.

Diagnosis of FIV infection is commonly made from a blood test that is available in most veterinary clinics. Initial FIV test results may be verified in some cases by tests that are done at outside laboratories. For example, our veterinarians may recommend verifying positive test results. Verification is done not only by performing more than one type of test but also by testing the cat at different times.

TREATMENT AND FOLLOW-UP

Treatment Options

No treatment is proven to eliminate FIV infection. Some antiviral drugs and immune-modulating drugs have been tried, but no treatment is curative. Healthy FIV-positive cats do not require any specific treatment. Cats that are FIV-positive and have clinical signs are treated with appropriate medications and supportive care for those signs.

Follow-up Care

Cats with FIV infection should be kept indoors and isolated from noninfected cats. Infected cats should not be bred, because the virus may be transmitted to the unborn kittens. The American Association of Feline Practitioners recommends that healthy FIV-infected cats visit a veterinarian at least twice a year for a complete physical examination and that a complete blood count, biochemistry panel, and urinalysis be done at least once a year.

FIV-positive cats do not benefit from vaccination for FIV; however, they may receive other routine feline vaccinations (for feline rhinotracheitis, calicivirus, and panleukopenia virus, as well as rabies) as long as they remain healthy. Vaccination for FIV is not currently recommended routinely for all cats, because it does not provide 100% protection and may be unnecessary in cats that are not allowed outside.

Prognosis

Cats with FIV infection may have a normal, healthy life for many years. In the later stages of infection (when the cat is immunocompromised and has a variety of secondary conditions), prognosis is guarded (uncertain) to poor. Euthanasia is not usually recommended based on a positive FIV test alone.