

Feline Herpesvirus (FHV-1)

Feline herpesvirus is a common cause of eye and upper respiratory infections in cats.

Cause

Feline herpesvirus (FHV-1) is a viral infection that is unique to cats; it is not contagious to people or dogs. Herpes is a highly contagious virus; many kittens are infected by their mothers early in life. Symptomatic cats that are housed with other cats will infect each other easily, which is why it is very common in both shelter cats and cats obtained by a breeder. Infection is passed through direct contact with nasal and ocular secretions or from the virus on common surfaces such as bedding, bowls, and kennels.

Clinical signs

Once a Herpes virus enters a patient's body, it never leaves, but it affects each cat differently. Young kittens that have a poor immune response can have severe inflammation of the nose and eyes, sometimes leading to permanent deformity. Kittens that recover from infection may have recurrent signs over the course of their life. Some cats will have chronic, recurrent nasal and sinus inflammation due to the deformity of the nose and sinuses after a pediatric infection.

Clinical signs and recurrence of infection can vary greatly between cats. Some cats will have mild signs after the initial infection and never recur, while other cats will have severe episodes throughout life. The variation can sometimes be explained by the presence of other physical stressors, such as concurrent diseases, poor nutrition, immune suppressant medications, or environmental conditions such as overcrowding. Minimizing stress and overcrowding helps to reduce the likelihood of recurrence; some cats' predisposition is unrelated to stress and can only be explained by immune factors. Many cats are carriers of the virus after the initial infection.

Some cats affected with FHV-1 may only have mild inflammation of one or both eyes (conjunctivitis). Other cats have more severe disease and may show ocular and nasal discharge, conjunctivitis, cough, sneezing, and poor appetite. Severe inflammation of the eye can occur, with some patients developing permanent scars and blindness.

Diagnosis

The definitive diagnosis of feline herpesvirus infection is accomplished by laboratory testing done on swabs of the oral, nasal, or ocular discharge. Blood tests are not an accurate way to test for the disease. Because of the prevalence of this viral infection, it is not always necessary to do the testing. This viral infection should be considered to be a contributing component in any cat with upper respiratory inflammation.

Treatment

Therapy for cats infected with herpesvirus is aimed at controlling clinical signs and reducing secondary complications. It is important to note that there is no cure for Herpesvirus, but anti-viral medications (both ocular and oral) and supportive care can reduce the severity of the infection. Oral antibiotics to treat secondary bacterial infections, nebulization to help with airway congestion, and intravenous fluid and nutritional therapy are sometimes necessary for severely infected cats. Kittens with severe ocular infections sometimes have profound and painful ocular swelling that requires surgical intervention. Because emotional or physical stress can precipitate a Herpesvirus outbreak, starting medications prophylactically (before a known stressor) may be recommended.

L-lysine, an amino acid dietary supplement, has been widely used in cats with Herpes infection. This supplement has been found to reduce the severity of infection as well as viral replication. This has been shown in a laboratory

setting but not in cats with natural infection. There are no studies proving that giving L-lysine as a supplement may benefit cats with Herpesvirus but many people feel it reduces symptoms.

Patients that develop chronic recurrent infection may benefit from home nebulization therapy with sterile saline (saltwater). This practice also helps cats that have nasal or sinus deformity from the previous infection to reduce the growth of opportunistic bacterial or recurrent viral infection. It is commonly used in a hospital setting for symptom relief; although there are no long-term studies of its use, there are no reports of adverse effects.

Vaccination against herpesvirus infection is included in the typical feline vaccination schedule provided by a primary care veterinarian. There are several different vaccine forms, including injectable and intranasal forms. A herpesvirus vaccine reduces the clinical signs of herpes recurrence but does not prevent future outbreaks. It is not recommended that the first vaccination be given to a patient with an active infection, it will not reduce the severity of signs and may add additional stress to the patient, complicating recovery.

Prognosis

Most feline patients infected with herpesvirus recover uneventfully and without the threat of long term problems. Kittens and patients with a compromised immune system can have a very difficult time recovering from the infection. Because these patients are often in a weakened state, the viral infection takes an enormous toll on them, and some will succumb to complications of infection. Severe inflammation of the eyes and nose can complicate long-term quality of life as well as cause some significant cosmetic scars, but many cats can coexist with their recurrent infection in the hands of devoted families.

Long Term Follow-Up

Patients with chronic, relapsing infection or that have developed scarring of the eyes, nose, and sinuses may need specialized care for their whole lives with an ophthalmologist or internal medicine specialist. Follow-up is necessary if the patient requires chronic or intermittent anti-viral therapy, respiratory therapy, or surgical intervention.