Feline Panleukopenia Virus

This document was created for information purposes ONLY and it is NOT meant to replace a consultation with a fully qualified veterinary surgeon (veterinarian). It is NOT intended to be used to diagnose or treat any cat. EndFIP® shares this information for educational purposes **exclusively**. Furthermore, creators and contributors strongly advise all readers to always seek the advice of a qualified veterinarian and to obtain professional advice on the correct regimen for your cat and his/her particular situation. **NO responsibility can be accepted.**

Feline panleukopenia virus (FPV) is a species of parvovirus (closely related to canine parvovirus) that can infect domestic cats as well as all wild felidae. In addition to members of the felid family, it can also infect raccoons, foxes, minks, etc. It is a HIGHLY contagious virus that causes gastrointestinal, immune system, and nervous system disease. Feline Panleukopenia is commonly referred to as: feline infectious enteritis, feline parvovirus, feline parvoviral enteritis and old-fashioned names such as "cat plague" and "feline distemper". Once a leading cause of death in kittens, Panleukopenia has been mostly eradicated thanks to the vaccine. It is one of the diseases for which cats are routinely vaccinated (the "P" in combination FVRCP vaccines). It's not contagious to humans

How does a cat become infected with feline panleukopenia virus?

Cats become infected when they come in contact with infected blood, feces, urine or other bodily fluids. The virus can also be passed along by people who have not washed their hands appropriately or have not changed clothing between handling cats, or by materials such as bedding, toys, food dishes or any equipment that has been used for the cats.

Kittens can acquire this disease in utero, or through breast milk, if the pregnant or nursing mother is infected. In general terms the prognosis is not good for kittens who have been exposed to this virus while in utero. When pregnant cats are infected, their kittens may be stillborn or suffer other developmental abnormalities.

Which cats are more prone to FPV?

The feline panleukopenia virus is considered ubiquitous, meaning it is in virtually every place that is not regularly disinfected. The infection is HIGHLY contagious among unvaccinated cats. In kittens, the period of greatest susceptibility to infection is when maternal antibodies are absent or waning and vaccine-induced immunity has not yet fully developed.

What are the symptoms of FPV?

The clinical manifestations of feline panleukopenia varies based on the viral load, the age of the cat, and prior immunity from maternal antibodies, previous exposure, or vaccinations. The cats that become

clinically ill are usually young (less than 1 year of age) but older cats can also be at risk. There is a high mortality in clinically affected kittens and sudden death can occur.

Clinical signs usually develop in 4-6 days after exposure, but can show in 2-14 days. FPV causes a marked decreased in white blood cells, leaving affected cats susceptible to a secondary bacterial infection. The virus primarily attacks the lining of the gastrointestinal tract causing internal ulceration, and ultimately total sloughing of the intestinal epithelium.

Symptoms of panleukopenia can include:

High Fever Lethargy Anorexia Vomiting Profuse, watery to bloody diarrhea

Abdominal pain Dehydration Weight Loss Anemia (due to lowered red blood cells)

Rough hair coat Loss of skin elasticity due to dehydration Depression

Neurological symptoms (tremors, lack of coordination) Head droop Nasal discharge

Conjunctivitis Terminal cases are hypothermic and may develop septic shock

How is the infection diagnosed?

Panleukopenia can mimic many other types of diseases and conditions including, but not limited to: poisoning, pancreatitis, feline leukemia (FeLV), feline immunodeficiency virus (FIV). It is of utmost importance to give your veterinarian a thorough history of your cat's health and recent activities. Please make sure to mention if your cat has recently come into contact with other cats, or if he/she is generally permitted to go outside. All these details can be important in pointing your veterinarian in the right direction.

Treatment and Prognosis

There is no cure for feline panleukopenia, so treatment is aimed at managing the symptoms while the cat's immune system fights the virus. Specific treatment depends on the severity of the case. The first major goal is to restore body fluid levels and electrolyte balance. Hospitalization (in an isolation room) is usually required, and intravenous fluids are usually necessary to fend off dehydration.

Antibiotics will not affect the virus, but your veterinarian may prescribe them to prevent or fight secondary bacterial infections. Medications to reduce vomiting may also be used and in severe cases, blood transfusions may be necessary. These treatments can be costly and prognosis should be discussed with the veterinarian as often it is poor. Unfortunately, kittens under 5 months of age are usually the most severely affected, and even with intensive treatment, the outcome can be fatal.

If your cat is treated promptly and effectively, he/she may recover fully but it will take several weeks for your cat to feel completely back to normal. Sadly, mortality is as high as 90% for feline panleukopenia.

Prevention

Vaccinations provide good protection against panleukopenia and are part of the core (essential for health) vaccines routinely given to cats. Your veterinarian will recommend a series of vaccines (usually starting at 6 to 8 weeks of age), and it is important to follow this schedule as the vaccinations are not totally protective until the full series is given. It is worthwhile to note your veterinarian's recommendations take into account consideration for the efficacy and longevity of each specific vaccine, the exposure, risks, and need of different cat populations. Socioeconomic limitations are also taken into consideration.

EndFIP®

Please make sure to discuss with your veterinarian the specifics of your situation to receive proper advice on the recommended types of vaccine and booster schedule for your individual cat.

FPV can remain on many surfaces, so it is important to practice safe and clean methods for preventing the transmission of the disease. However, even under the cleanest conditions, traces of the virus may remain in an environment in which an infected cat has been. The feline panleukopenia virus is resistant to disinfectants and can remain in the environment for as long as a year, waiting for an opportunity.

If you have had a cat with panleukopenia, please talk to your veterinarian about precautions to take before introducing any new kittens or unvaccinated cats into your home. A diluted bleach solution to clean surfaces and left with appropriate contact time will kill the panleukopenia virus but cannot be used on all surfaces that might harbor the virus. Any soiled bedding and soft toys an infected cat may have used, of played with, should be discarded.

Lastly, washing your hands with soap and water after handling any animal will minimize the chance of you passing infections to healthy animal. Keeping cats and kittens indoors and away from other unvaccinated cats is the best way to prevent exposure to the virus.

"There is nothing so patient, in this world or any other, as a virus searching for a host." – *Mira Grant*