



1333 Plaza Blvd, Suite E, Central Point, OR 97502 * www.mountainviewvet.net

Feline panleukopenia, feline parvovirus, feline distemper

Feline distemper

Affected Animals:

Cats, minks, raccoons.

Overview:

Caused by the feline parvovirus, feline distemper, or panleukopenia, is a serious and potentially fatal disease. In its most severe form, feline distemper kills the white blood cells that fight off disease and infection. The disease also can destroy the cat's digestive tract, preventing the intestines from digesting food and absorbing liquids and nutrients. Vomiting and diarrhea can result in severe or fatal dehydration. In addition, affected cats can succumb to secondary bacterial infections because of the reduced number of white blood cells. Because their immune systems are not fully functional, kittens and cats with impaired immune systems are more likely to show severe signs or die from the disease. Healthy, mature cats may show only mild or no symptoms at all.

Newborn kittens that contract panleukopenia while within the mother's uterus have a very different response to the disease. They may develop permanent brain damage and have a hard time walking and maneuvering, but they often survive.

There is no cure for panleukopenia; thus, treatment is in the form of supportive care. Dehydration can be alleviated through the use of fluids administered in the vein or below the skin. Antibiotics can be given to treat secondary bacterial infections. Most importantly, an effective vaccine is available that will prevent the disease's transmission.

Clinical Signs:

About a week after being infected with the virus that causes panleukopenia, cats will begin to experience continual vomiting, weight loss, decreased or absent appetite, fever, diarrhea that may contain blood, and dehydration. Often animals with the disease will be listless or lacking in energy. Some cats can develop a yellow color to the ears and eyes due to jaundice caused by developing liver disease. Cats with the disease often have a decreased number of white blood cells. Bloodwork also will show a marked panleukopenia and some changes in the liver enzymes.

Symptoms:

See clinical signs.

Description:

Most frequently, the parvovirus is passed to the cat or kitten when the animal inhales or ingests secretions from cats infected with the virus. The virus replicates within the tissues and then travels to the blood stream, where it continues to spread throughout the cat's body. The virus destroys the digestive tract and makes it unable to function normally: the intestines lose their ability to digest food or absorb any liquid or nutrients. As a result, vomiting and diarrhea often occur, causing severe dehydration that can be fatal if not treated.

The disease becomes more serious when it enters the cat's bone marrow, which manufactures the red and white blood cells and platelets. When panleukopenia reaches this stage, the cat may become very ill or die, since its capacity to fight off infection will be impaired by the decrease in white blood cells.

When a kitten becomes infected with the parvovirus while within its mother's uterus, part of its brain called the cerebellum may not develop normally, resulting in permanent brain damage. This condition, clinically known as cerebellar hypoplasia, can cause the animal to experience tremors in the head and have difficulty walking and maneuvering. Cerebellar hypoplasia does not grow more severe as the kitten matures, but the damage is permanent.

Diagnosis:

The veterinarian will suspect panleukopenia if the cat has symptoms of the disease and a very low white blood count. However, making a positive diagnosis of distemper requires ruling out all other diseases causing similar clinical signs. Other ways of diagnosing this disease include using an electron microscope to find the virus in a fecal sample, or sending a blood sample to a laboratory to detect exposure to the virus.

Prognosis:

Cats that develop feline parvovirus become very sick; there is a 50 to 90 percent chance that affected kittens will die from the illness because of their immature immune systems. Also, adult cats with weak immune systems do not have a good prospect of surviving. Healthy animals, however, are often able to fight the illness and their symptoms tend to be less severe. If a cat survives the disease, it is immune to reinfection for life.

Transmission or Cause:

Feline parvovirus is shed in all secretions of infected cats; it is very hardy, and resistant to many disinfectants. The virus can survive in the environment and remain highly contagious for over a year.

Treatment:

There is no cure for panleukopenia or the parvovirus that causes it, so treatment involves supportive care. Preventing dehydration in cats that experience continual vomiting and diarrhea requires the administration of fluids -- either into the cat's vein, through intravenous fluid therapy, or under the skin through a procedure called subcutaneous fluid

therapy. Antibiotics can help prevent or treat bacterial infections in cats that have a low white blood cell count because of the disease.

Prevention:

The best prevention is proper vaccination against the virus starting approximately when the kitten is six to eight weeks old. Repeat vaccinations will be necessary when the animal is nine, 12 and 16 weeks of age. Properly vaccinated cats have long-term immunity.

Feline parvovirus can survive in the environment for over a year and continue to infect other cats that come into contact with it. The virus is very difficult to kill. The only substance that will eliminate it is household bleach diluted with tap water at a concentration of approximately 31 parts water to 1 part bleach. Rinse the surfaces well if animals are to be housed on bleached surfaces. Also, make sure the area is well ventilated to prevent fume inhalation.