



FELINE INFECTIOUS PERITONITIS

What is feline infectious peritonitis?

Feline infectious peritonitis (FIP) is an important but uncommon disease of cats caused by infection with FIP virus (FIPV). Although FIP is not a particularly common disease, it is important because once cats develop the disease, it is almost invariably fatal. It is important to remember, however, that not all cats infected with the FIP virus go on to develop the disease - indeed only a small minority do! There are many different strains of FIPV, which differ in their ability to infect cats and to cause disease. In addition to different strains of FIPV, there are some other very closely related viruses known as feline enteric coronaviruses (FECV) which also infect cats, but cause little or no disease. Many vets believe FIP is a virulent, mutant strain of these FECV.

How does a cat become infected with FIPV?

It is not certain how most cats become infected with FIPV. Direct contact between cats is the most likely route of transmission as the virus is quite fragile and does not survive long in the environment. Many cats that develop FIP have not had contact with other cats showing clinical signs though, and it is therefore thought that carrier cats (healthy cats carrying and excreting the virus) may be an important source of infection. Also, some cats may be infected with FIPV, but the virus may remain dormant (or 'latent') in the body for several months or even years in some cases before the cat eventually develops disease.

What clinical signs does a cat infected with FIPV develop?

Most cats exposed to FIPV are able to develop an immune response which protects them, **thus only a small proportion of infected cats actually develop clinical disease.** However, those that do develop disease almost invariably die.

In cats which do develop disease, the first signs of illness may be very vague - dullness, lethargy, inappetence and variable pyrexia (raised temperature) are common findings. After a period of several days or a few weeks other signs will develop. Most commonly this involves the accumulation of fluid in the abdomen or chest leading to a swollen abdomen or difficulty breathing. In some cats, little or no fluid accumulates but the virus may cause inflammation in the eye, the brain or other organs of the body leading to a variety of clinical signs. Once disease develops, most individuals deteriorate fairly rapidly, although some cats remain quite bright for several weeks. However, eventually the disease will result in death.

How can FIP be diagnosed?

Unfortunately, FIP is sometimes particularly difficult to diagnose definitively prior to post mortem.. X-rays and ultrasound may be helpful to determine the presence or absence of fluid in the abdomen

or chest, and some changes may be found on routine blood analysis but none of these findings provide conclusive proof of FIP (other disease can also cause the same abnormalities). If fluid is present, it is possible to remove some for analysis in a laboratory, which can be particularly valuable as there are few other disease which cause the same type of fluid as occurs in FIP. Nevertheless, again the fluid analysis does not provide a definitive diagnosis of the disease.

Another blood test that is commonly performed is to look for antibodies against FIP virus in the blood ('coronavirus serology'). It is important to understand that this test too has limitations, and a positive result only means that a cat has been exposed to either FIPV or one of the other closely related viruses (such as FECV). The test is not able to provide a diagnosis of FIP - **many perfectly healthy cats will have positive test results, as most cats exposed to these viruses do not develop disease.**

Currently the only way to make sure of the diagnosis of FIP is by histological examination of affected tissue (or by post-mortem examination) by a pathologist at a laboratory. If there is any doubt about the diagnosis therefore, a biopsy may be suggested by the veterinary surgeon so that FIP can be distinguished from another, perhaps treatable, disease.

In the future more reliable diagnostic tests based on blood samples rather than the need for a biopsy may become available.

Is there any treatment for FIP?

FIP is a fatal illness, and essentially all cats that develop clinical signs will go on to die of the disease. As antibiotics are not effective against viruses they will not help to overcome FIPV, and there are currently no drugs available to specifically treat this condition. The use of cortisone-like drugs may help to improve the cats well-being and make it more comfortable for a time, but they do not alter the fact that a cat with FIP will not recover. In many cats, once a diagnosis has been made euthanasia is often the most humane and appropriate course of action.

How can disease be prevented?

Control of FIP is very difficult. At present there is no FIP vaccine in Australia, although one is available in some other countries. If FIP is diagnosed in a multicat household, it is sensible not to introduce any new cats into the house for at least six months. Similarly if the cat came from a single-cat household, although the virus is not likely to survive long in the environment, it is probably sensible not to introduce a new cat into the house for a period of 1-2 months to try and avoid any potential exposure to the virus.

Any questions still unanswered? Please contact us on 08 9300 2322