

NEW ZEALAND CAT FANCY

GUIDELINES

FELINE INFECTIOUS PERITONITIS

QUESTIONS & ANSWERS

- Q** Are all my cats going to get FIP now one has died from it?
- A** No.
- Q** Do I need to desex all my breeding cats right away?
- A** No.
- Q** If I have a cat die with FIP, can I carry on breeding?
- A** Yes, although not recommended to breed from the same parents again.
- Q** What if a pet owner reports a FIP death - is that the same as having one die who was in my cattery?
- A** Yes.
- Q** After a FIP death in my cattery can I sell related cats as breeders?
- A** Yes, although would generally recommend not from the same parents.
- Q** How long after the death of one of my cats from FIP should I wait before introducing another cat to the household or cattery?
- A** FIP cannot be transmitted from cat-to-cat, so no stand-down period is required. However it is always good practice to thoroughly clean and disinfect before getting a new kitten.

INFORMATION & MANAGEMENT

These guidelines are based on current understanding of FIP and may be updated in the future.

INTRODUCTION

Feline infectious peritonitis (FIP) is caused due to a mutation within an individual cat that has been infected with feline enteric coronavirus (FCoV).

Approximately 20 - 60% of domestic cats will be positive on a blood test for feline coronavirus. In some cases 90% of cats in animal shelters or in pedigree catteries will be positive for feline coronavirus. Despite the fact that so many cats have FCoV, less than 5% of them develop the viral mutation that leads to FIP.

Development of FIP is an individual event.

FIP is not contagious in the way we think of most infectious diseases. FIP is due to a complex interplay between:

- the cat and its genetics,
- the environment including stressors, and
- the virus itself.

FIP can affect cats of any age. However it most commonly affects cats between 4 - 18 months of age, and then cats about 9 – 10 years of age.

Infection with feline coronavirus usually causes mild gastrointestinal disease (diarrhoea and vomiting) and in many cases no symptoms will be recognised. Some cats will have a mutation of the coronavirus and develop FIP.

TYPES OF FIP

There are two forms of FIP – the wet (effusive) form and the dry (non-effusive) form.

EFFUSIVE FIP

The first signs are often noted 1-2 months after a stressful episode (kitten moving to a new home, surgery) or exposure to infection with FCoV. The main identifier of effusive FIP is the accumulation of fluid within the abdomen or chest. Symptoms can include lack of appetite, loss of weight, fevers, jaundice, and diarrhoea, and eventually breathing difficulties.

NON-EFFUSIVE FIP

Clinical signs are less obvious and may include progressive weight loss, lack of appetite, chronic unresponsive fever, enlarged lymph nodes. Non-effusive FIP is considered to be a more chronic, smouldering form of the disease. Eye lesions are common in patients with non-

effusive FIP. Neurological signs occur in about up to a third of cats with non-effusive FIP. Clinical signs include depression, lack of coordination, tremors, seizures, and muscle weakness.

The incubation period for FIP is days to months, but once a cat is infected with FIP, the disease course is only days to weeks.

DIAGNOSIS, TESTING, AND TREATMENT

DIAGNOSIS & TESTING

FIP is difficult to diagnose. No single test exists; diagnosis is made by taking the sum of numerous findings. A positive FCoV antibody test does not diagnose FIP and a negative FCoV antibody test does not rule FIP out.

TREATMENT

A highly effective treatment, GS 441524 (Remdesivir), results in permanent remission of the disease by inhibiting replication of the virus but the drug is only effective when given at high doses. It is primarily given by injections - one injection daily for 84 days.

The course of treatment is expensive and can be stressful for owners and cats, therefore it requires careful consideration.

It is essential that owners considering this have access to a veterinarian that is knowledgeable about FIP, who can assist and monitor the cat during the treatment period.

At this time, other than with this treatment, all cases of FIP are fatal.

CONTROL IN BREEDING CATTERIES

HYGIENE

New information suggests that the virus is more stable in the environment than previously believed. While it is easy to kill FCoV and FIP viruses on a surface with common disinfectants (1:32 dilution bleach) and detergents, if dried virus is left in less accessible areas, it may survive for several months.

Faecal-oral transmission is important. Try to separate litter trays for queen from those for kittens, e.g., queens litter tray on bench where kittens can't jump to, kittens litter tray inside pen with bars that kittens can fit through but not the queen. Clean litter trays of faeces at

least daily and a complete clean at least weekly. Have more than one litterbox for every two cats. Keep litter trays well away from food and water sources.

GROUPING

Keep a small population. One of the risk factors for development of FIP is housing six or more cats together. Crowding is a stress factor and needs to be avoided.

Maintaining stable groups and avoiding disruption of introductions is a valuable goal.

Avoid having the majority of the cattery under 3 years old and instead aim for a stable population over 3 years old, adding younger cats only when necessary.

Do not mix litters of kittens together.

BREEDING

It is recommended that breeders should take action to minimise genetic susceptibility to FIP in kittens of their breeding by the following:

- Not repeating a mating that has produced even one offspring that developed confirmed FIP.
- Desexing an individual cat that has produced offspring in more than one litter that have developed FIP.
- Carrying out pedigree analysis and looking for common ancestors where several pet kittens (in different households) have developed FIP.
- Reducing inbreeding which has been found to be a major risk factor in developing FIP.
- Considering testing breeding cats for the 'resistance gene' which may enable the identification of cats whose immune system provides protection against developing FIP. Testing and selective breeding may reduce the probability of cats developing FIP.

Cats sold for breeding should have all information disclosed about closely related FIP occurrences.

EARLY WEANING THEORY

The purpose of early weaning is to delay or prevent the exposure to feline coronavirus but to be entirely successful this requires quite involved isolation and hygiene. The early weaning theory is now not recommended as it reduces the kittens immunity to coronavirus.

GENERAL

Minimise other stressors.

Maintain good nutrition.

Maintain good parasite control.

WHEN IS IT SAFE TO GET ANOTHER CAT AFTER ONE DIES OF FIP?

Since this is not a contagious disease, one can argue that you do not need to wait before getting another cat. If you want to see that there is no remaining coronavirus around the house leftover from the deceased cat, a three-month period has been advocated.

FURTHER READING

Dr Neils Pederson's site has plenty of information, including cattery management:

<http://www.sockfip.org/>

The [EveryCat Health Foundation](#) has an article in its Cat Health Library which has some good information and references:

<https://everycat.org/education/cat-health-research-library/>

Dr Diane Addie's approach aims for coronavirus free catteries and may be of interest:

<http://www.catvirus.com/>