



FIP TREATMENT INFORMATION FOR CAT OWNERS

CLEARPOINT PHARMACY'S COMPOUNDED GS-441524

ABOUT FELINE INFECTIOUS PERITONITIS (FIP)

FIP is a potentially fatal viral infection which is caused by a mutation in the common feline coronavirus. Many cats are exposed to feline coronavirus, especially when they live around other cats. In most cases, there are no symptoms other than mild diarrhea, so this infection typically goes unnoticed. However in a few cats, the virus mutates into a new form (FIPV) which can spread throughout the body, causing an intense inflammatory response by the immune system.

Since FIP can affect any part of the body, cats with FIP can show a variety and combination of symptoms. Many of the symptoms are non-specific signs of illness such as lethargy, fever, loss of appetite or weight loss. Some cats may accumulate fluid in their abdomen, or around their lungs or heart. This is often referred to as "wet" or effusive FIP. In these cases you may notice a swollen belly or difficulty breathing.

Some cats will not show any signs of fluid accumulation, which is commonly referred to as "dry" or non-effusive FIP. The dry form often involves severe inflammation in one or more organs including the eyes, brain, liver, intestine, or other organs of the body, leading to a variety of clinical signs. Symptoms commonly seen include:

- Wobbly gait (ataxia)
- Seizures
- Bleeding, cloudiness or other eye
- Inflammation
- Yellow-tinged skin (jaundice)
- Abdominal masses
- Enlarged organs

Once disease develops, without treatment, most cats deteriorate rapidly, although some deteriorate more quickly than others. Until the recent introduction of antiviral treatments, the disease was fatal in almost every case.





WHAT CATS ARE MOST AT RISK FOR FIP?

FIP is diagnosed most often in young cats under 2 years of age, pedigree cats and cats in multi-cat homes (e.g. homes with several cats, breeding environments, shelters). Stress and genetics also play a role in susceptibility to this disease.

DIAGNOSING FIP

Diagnosing FIP can be tricky, since many symptoms are non-specific, and although PCR tests exist, they are not sensitive enough to be run on blood, and have high false negative rates. There are a number of diagnostic tests which can help provide evidence for FIP such as blood panels, ultrasound, cytology of fluid or tissue.

When the diagnostic picture is not very clear, a treatment trial can be a safe, economical and time-saving way to confirm an FIP diagnosis.

TREATING FIP

FIP can now be treated very successfully with antiviral medications such as GS-441524. Research has shown that about 85% of cats will respond to treatment.

Treatment consists of administering the medication daily. 12 weeks of antiviral treatment (such as with GS-441524) is the current recommendation for FIP treatment. Recent research suggests that shorter treatment durations may be possible for some cats, but until there is more data the general recommendation continues to be 12 weeks of treatment.

SIDE EFFECTS

GS-441524 is generally well tolerated but report any changes in your cat's health or behavior to your veterinarian. Especially report any worsening or new symptoms as the dosage of the medication may need to be adjusted.



MONITORING DURING TREATMENT

Typically you should see visible improvement in your cat's appetite, activity level and symptoms within several days. For cats with abdominal fluid, you should typically begin to see a reduction in the fluid after about a week. If you are not seeing this improvement or are not sure, consult your veterinarian, as your cat's dose may need to be adjusted. At the start of treatment, your cat may need supportive care such as appetite stimulants, anti-nausea medications, eye drops or other medications or treatments. Follow your vet's directions for administering and discontinuing any supportive care.

As you go through treatment, your vet will monitor their response by physically examining them and doing bloodwork. Most typically these check-ins are done at 6 and 12 weeks of treatment, but if your cat has other conditions or is not responding to treatment as expected they may require earlier or additional monitoring as directed by your veterinarian.

It is particularly important to closely monitor your cat's weight weekly throughout treatment as the dosage of this medication needs to be adjusted as weight is gained. Failure to do so is one of the most common causes of treatment failure. Some cats may gain large amounts of weight during treatment, especially if they lost a lot of weight while sick or are growing kittens. Using a pet or baby scale at home can be a good way to accurately track your cat's weight and report it to your veterinarian.

MEDICATING YOUR CAT

This medication, either liquid oral suspension, tablet or capsule can be given directly into your cat's mouth.

- Liquid Oral Suspension: You can either squirt the liquid directly into your cat's mouth using the provided syringe or mix it into a small portion of food or a lickable treat your cat enjoys.
- Tablet or capsule: The tablet or the capsule can be hidden in a small amount of food or a tasty treat or given directly by placing it into your cat's mouth.

It's recommended to give this medication on an empty stomach. Avoid feeding your cat a large meal for at least one hour after administration.

Your veterinarian may direct you to give your cat this medication either once or twice daily. It is very important to make sure that your cat receives their prescribed dose(s) every day. If you miss a dose, give it as soon as you remember, and then continue with the regular dosing schedule. However, if it is almost time for the next dose, skip the missed dose and resume the regular dosing schedule. Failure to give your cat their medication every day as directed may lead to treatment failure.

12 weeks of antiviral treatment (such as with GS-441524) is the current recommendation for FIP treatment. Do not stop treatment without consulting with your veterinarian. Stopping treatment prematurely can cause your cat to relapse and become sick again.



If you are having difficulty administering this medication, consult your veterinarian or pharmacist for advice on administration techniques. For online tips on administering medication to your cat, please check out the International Cat Care group's tips on medicating a cat:

How to give a cat medication - International Cat Care

<https://icatcare.org/articles/how-to-give-a-cat-medication>

FREQUENTLY ASKED QUESTIONS

Are feline coronavirus antibody tests a reliable diagnostic tool?

No. These tests are not specific to FIP, and most cats will have antibodies to FCoV through natural infection with FCoV or vaccination. In addition, negative antibody test results do not rule out FIP, since as many as 10% of cats with FIP do not have anti-FCoV antibodies. AAFP FIP diagnosis guidelines do not recommend antibody testing in serum, plasma or any other fluid as a diagnostic for FIP.

Should GS-441524 be used to treat FCoV/FECV in cats that are not symptomatic for FIP?

No. Antiviral treatment should be reserved for cats diagnosed with FIP. Attempting to treat FCoV/FECV is unlikely to be successful in the long term and may encourage drug resistance and the creation and spread of viral strains that are antiviral-resistant, reducing or preventing the effectiveness of those antiviral drugs against FIP. Do not give GS-441524 to cats except under the advice and prescription of your veterinarian.

What if my cat develops new ocular or neurological symptoms during treatment?

This may indicate that a higher dose is needed. Consult with your vet so that they can advise whether the dose should be increased.

What if I miss giving my cat a dose?

If you miss a dose, give it as soon as you remember, and then continue with the regular dosing schedule. However, if it is almost time for the next dose, skip the missed dose and resume the regular dosing schedule.

If I started treating my cat using a black-market product, can we transition to using compounded GS-441524?

Yes. It is recommended that cats using black market FIP treatments transition to compounded GS-441524 as soon as possible.

Should cats diagnosed with FIP be quarantined?

It is not considered necessary to quarantine a cat who has been diagnosed with FIP as research shows that cat-to-cat transmission is extremely rare if it happens at all. Studies have confirmed that even in cases where cats in close contact with each other developed FIP, the virus mutated independently from FECV within each cat rather than horizontal transmission of the mutated FIP virus.



When should oral vs. injectable FIP treatment be used?

FIP cats can be successfully treated with oral GS-441524 beginning on day one of treatment. Injectable treatment is only needed in rare circumstances such as:

- Severe neurological symptoms/inability to swallow
- Severely dehydrated or critically ill cats
- Cats that cannot be safely medicated orally

If injectable medication is required, Remdesivir can be prescribed for intravenous or subcutaneous administration. Typically it is only used for a few days until the cat can transition to oral treatment.

Can pregnant cats safely undergo FIP treatment?

Pregnant and nursing cats with FIP can safely be treated with GS-441524.

Should the Vanguard (formerly Primucell) Feline FIP Vaccine be given to protect cats from FIP?

The existing Vanguard/Primucell vaccine for FIP is not recommended for use as it has shown to not be effective in preventing FIP in cats for whom FIP risk is highest, and may even worsen the effects of the disease.

Is safe to administer flea treatment or deworm cats being treated for FIP?

Yes

When can my cat be spayed or neutered? What about other surgeries?

Ideally elective procedures such as spay/neuter would be performed about a month or more after treatment has been successfully completed. However, if delaying spay/neuter is causing your cat stress, it is possible to perform the surgery during treatment provided that they are doing well on treatment and that several weeks of treatment will remain after surgery.

If your cat is stable and has shown favorable response to treatment, other surgeries can be performed if medically necessary. Care should be taken to conduct the surgery and recovery period in the least stressful protocol and logistics possible.

Is it safe to vaccinate my cat during treatment? What about post-treatment?

There is no study data available regarding routine vaccination during or after FIP treatment. Current clinical experience indicates that vaccinations can be given as recommended for the cat based on environment and risk during or after FIP treatment as long as the cat is doing well clinically. Consult with your vet regarding their recommendations for vaccination.

