

December 7th 2008

I recently had a kitten diagnosed with "wet" FIP. I would like to share the best information I gathered while treating her to help others. Of all the cases of FIP that our vet had treated, he did have one cat maintain long-term remission with consistent high dosage of the steroids. This cat is still alive and healthy enough to enjoy life seven years later, although the treatment will likely lead to diabetes. This cat had only been treated with Prednisolone and hydration therapy to my knowledge. I know that no type of interferon was used. We decided to give our kitten the best supportive care possible to improve the very remote chance she could recover. We also decided we would do this until our vet recommended considering euthanasia. We know cats are notoriously effective at concealing suffering and did not believe we were qualified to know well enough. It is proven that they might still purr despite severe pain.

If your cat has been diagnosed with FIP, Dr. Addie's site (<http://www.dr-addie.com/WhatIsFIP.htm>) is the best place to begin. However, after reading many other case studies I believe the section of her site devoted to interferon omega treatment is outdated and too hopeful. I will include these studies so that pet owners can decide for themselves. It is very expensive medicine.

Our kitten, Panda, was a Scottish Fold. She started sneezing the same day we brought her home. We took her to our vet and it appeared to be nothing more than an upper respiratory infection. She had already received the 4 in 1 vaccination, so we thought she was ok and protected against the calici and herpes virus. She received antibiotics for treatment and the flu symptoms did stop, however she again became lethargic from a high fever just as the antibiotic schedule was ending. We took her to the vet again, and he was now fairly certain she had FIP. She had a recurring high fever that was unresponsive to the antibiotics and she had an effusion that was beginning. He took an x-ray to show me the abdominal fluid and showed me the fluid he extracted. It was straw colored. It took a week to get the test results back and it was positive.

What we did or learned:

Homeopathic Treatment – We ordered express delivery of a

homeopathic "FIP kit" at considerable expense from Australia the day after our kitten was diagnosed. I don't have experience with homeopathic treatment or reason to believe it is effective, but we were willing to try anything that would not cause her discomfort. We later decided not to use it after consulting with a homeopathic doctor here in NYC with experience treating FIP. It sounds like this may be useful for preventive care to bolster a kitten's immune system or during the initial stages of fighting the FIP virus (before symptoms are even evident to know its FIP), but it will not help once clinical symptoms have developed. The company we ordered from is the Holistic Animal Medicines Pty. Ltd. at :
http://www.holisticanimalmedicines.com/ailments_info.php?ailments_id=142

Vitamin C formula - I also read many anecdotal accounts of miracles on blogs. One consistent story is success with very high dosages of vitamin C. One of the better sources of info on this can be found here: <http://jsey905.9cy.com/fip.html>

Vitamins and Antioxidants - Dr. Wendell Belfield has had success treating FeLV and FIP with vitamin C. He also markets a mixture for treatment branded "Mega C". It can be found here: <http://www.belfield.com/products.php>

Dr. Belfield is now retired, but was very kind to respond to my inquiry submitted to his website. He confirmed his protocol is focused toward prevention and control of FIP. This would include FIP positive cats that do not have symptoms.

We did not purchase the Mega C formula, but we did buy approximately \$70 worth of vitamins and antioxidants. This included everything listed on Dr. Addie's site. Panda was still eating, but would not eat anything with any of the vitamins or antioxidants included. We tried giving her the vitamin c (sodium ascorbate powder form) with an oral syringe, but it made her mouth foam and she spit it out. We did not continue trying this since it was obviously very unpleasant for her. We did not pursue asking our vet to give her daily intravenous injections since there was no reason to believe this would make any difference during the late stages of the disease and it would be very uncomfortable for her. We also tried "pill pockets" that are made by Greenies which also make her favorite treat, but she would still not eat it.

Trental (pentoxifylline) – I spent a good deal of time looking for Veterinary Colleges that are invested in researching the latest forms of treatment. This included Cornell, the University of Washington, and U Penn among others. While hunting for some method of obtaining the feline interferon omega, I met someone very kind and helpful on an FIP group. He had someone at U Penn that had helped while he his kitten was still alive. With his help, I received a suggestion from a professor of medicine at U Penn for medication that could help treat vasculitis since our kitten had the effusive or “wet” form. I will not include his name since I have not obtained his permission. You can ask your vet about Trental. Our vet was just starting to look into it. To be clear, this is no cure. It sounds like it could provide palliative treatment to extend their life.

Feline Interferon Alpha – I will later include links for the case studies of various methods of attempts at treating FIP. After all that I've read, there are no controlled studies that prove any type of interferon helps. Sorting through the variations of this drug and methods of obtaining it took a considerable amount of time. My vet helped by directing me to a pharmacy in the US that sells a feline interferon alpha. I had also contacted “compound pharmacies” to find out if they could make the interferon omega type, but they only produced the human interferon alpha type. It is important to note here that my vet wrote a prescription for Interferon Alpha 2A. This pharmacy sent Interferon Alpha 2B. My vet wasn't familiar with this type and was surprised they sent it since it did not match what he prescribed. I called them and they did confirm this is a feline specific type and not the human interferon alpha. I still don't know the difference between the 2A and 2B, but we did start using it. The 2B type is the only kind they sell. It can be found it at Vetcentric in Maryland: <https://www.vetcentric.com/index.cfm> Since this type was easier and quicker to obtain, we decided to get it while waiting for the interferon omega. It is also much cheaper than the omega type. It was \$32 for a month supply compared to nearly \$200 for the 2 vial omega type from Bestpet. I never found any studies conducted with a feline interferon alpha. I only found studies using the human interferon alpha.

Recombinant Feline Interferon Omega – There is a lot written about this drug. I did not take anecdotal accounts too seriously. I

was looking for controlled medical studies. Here are the most useful sources I found.

This might sound silly, but if you are like me you will exhaust every possibility. The single best source of info I found is this dissertation on FIP treatment. It includes every study I had read about previously as well as some additional info about those studies. It does include Dr. Ishida's success with the interferon omega, and most significantly how this may have had success due to many variables such as a corona virus strain that could feasibly be "weaker" in Japan than what is found in Europe. Nobody knows and Dr. Ishida's treatment was not a controlled study. It was never even confirmed with 100% certainty that the treated cats had FIP. This can still only be confirmed 100% with an autopsy. Unfortunately it is written in German. You can follow this link for the Google translation of it to English:
(http://translate.google.com/translate?hl=en&sl=de&u=http://edoc.u.b.uni-muenchen.de/7935/1/Ritz_Susanne.pdf&sa=X&oi=translate&resnum=4&ct=result&prev=/search%3Fq%3DPromodulin%2BFIP%26hl%3Den%26sa%3DG). If you click the link "view original page" it will download a pdf in German.

There are many good files at the FIPcatsupport yahoo group.

These include recent interviews and lectures by leading researchers. This group's info is listed further below.

Amy Shojai's article was helpful to me. It can be found here:

<http://www.shojai.com/articles/FIP-2.html>

Dr. Addie interview: http://www.moggies.co.uk/articles/fight_fip.html

Interview including Dr. Gunn Moore. I had previously read fragmentary accounts of him having success with interferon omega. Site at:

<http://thecatswhiskers.wordpress.com/2007/05/16/feline-infectious-peritonitis-fip-in-a-nutshell/>

Reports from worldwide veterinary research was also important for me to find. Here is one:

<http://www.vin.com/proceedings/Proceedings.plx?CID=WSAVA2007&PID=18126&O=Generic>

FDA Approval for Import – The first thing to note is that you are not actually getting "approval". I'd read about a very kind person,

Michelle Rose, that had a prepared packet for Vets willing to go through the approval process, but its not necessary. A simpler and faster method is obtaining a “Letter of Non-Action”. Essentially this is the FDA stating that they neither approve nor disapprove of the drug, but will allow import. I found instructions on an FIP group site. The best source of information and instructions I found was at this online yahoo group called FIPcatsupport (<http://pets.groups.yahoo.com/group/FIPCatsupport/>). You can sign up and go to their “files” link. You can then go to “How to Obtain FOI in the US”. When completing the request letter you must specify the exact product you are ordering and from whom. I originally used the quantity specified in the letter shell because I simply don't know. My vet left it as is since he had never done this before, and it was a problem. Michael Zimmerman at the FDA had never received a request for such a large quantity. I had to call him directly and explain what was going on. I then specified the 2 vial box sold by Bestpet. Mr. Zimmerman was very kind. I had already sent him an email to let him know the request from my vet was coming and why it was urgent to approve quickly. I had read the approval process can take 3 – 4 weeks. Mr. Zimmerman informed me that this is how it used to be, but he changed it since assuming the position. He approved ours the same day.

Pharmacies for Export - If you live in the US and decide to get it, here is what I learned when I did. I contacted Callum Blair at Virbac. This is the company that produces Virbagen Omega, which is the recombinant feline interferon omega. I had inquired about any other pharmacies beside Abbeyvet (<https://www.abbeyvet-export.co.uk/profilef.htm>) that would export to the US. You can also obtain it from Bestpet Pharmacy (http://www.bestpet.co.uk/search_results.asp). It is important to note that Bestpet carries two products for Virbagen Omega. One is a 2 vial box and the other is a 5 vial box. Just before completing the FDA approval request that includes exactly what and whom you're ordering from, I noticed the 2 vial box says “for cats and dogs”, but the 5 vial box only says “for dogs”. You can see this if you enlarge the image of the box on their site. It is not stated anywhere else. I called the pharmacy and they weren't absolutely certain offhand if these were exactly the same or not (they

probably are). I therefore specified the 2 vial box. I called both pharmacies to review shipping in detail. Abbeyvet ships on Mondays and Fridays only (at least for exports to the US). Bestpet ships Monday through Friday. You will want to call and speak with someone directly to eliminate chances of error. My shipment became more complicated because of the Thanksgiving holiday. This medicine must remain chilled below a given temperature to remain stable. Therefore, timing for the shipment is very important to insure it does not sit long in a warehouse. Bestpet screwed up my shipment after everything I had done to insure this would not happen. The first problem was that I was contacted to give approval for the expedited shipping charges the day it was to be shipped. I had already given that approval when placing the order over the phone. By the time I could provide approval for a second time, it had already delayed shipment by one day. I had also requested a tracking number to follow it carefully. Their next mistake was shipping it without a commercial invoice. This resulted in the package being held for a day while receipt of the invoice was pending. FedEx confirmed this is standard for international shipments. I was very angry about all of this after trying so hard to insure delays would not happen. The next delay was expected. We had the FDA approval for import, but it takes time for the FDA personnel to get around to providing "clearance" at the port of entry before the package will continue shipping. I would recommend looking up the district office for the FDA near your port of entry for international imports. For me, this was Newark, NJ. I would also highly recommend calling the number you find to insure it is correct or even works. The FDA numbers listed on their website for NJ don't even have the correct area code listed. The day it was stuck in Newark, I had success reaching someone at FedEx relatively quickly to request and confirm the package was placed in a refrigerator. I also needed to get the "entry number" from FedEx for the FDA to identify it. FedEx is not normally familiar with this number, but the number they found was correct. It literally took over six hours of phone calling to get the correct FDA agent on the phone. One FDA agent told me they have nothing to do with any FedEx packages, so be fooled if you speak with him. After reaching the correct person, he was able to immediately give

clearance, and it could now be delivered the next day (another day delayed).

The interferon omega arrived the day we had to put Panda to sleep. After all that I read, I have no substantial reason to believe it could have helped anyhow. Panda's liver had started failing. Her legs were swollen and yesterday morning was the first time she would not eat. She also had increasing signs of jaundice with yellow coloration in her mouth. Our vet confirmed her chance of recovery now that her liver was failing was pretty well out of the question. I believe the one cat he had treated that did survive went into remission before significant damage had been done to his organs.

If we are ever unfortunate enough to have another cat that develops FIP, I would do the following.

1. If we managed to catch it during the first stage, I would want immediate treatment with vitamins/antioxidants, Prednisolone or Dexamethasone (immunosuppressants), feline interferon alpha, and feline interferon omega as soon as I can get it. Maybe there is a very remote chance of fighting off the FIP virus during this stage. The problem is it is highly unlikely to catch at this stage. I've actually never read anything explaining how you could. I'd read that it is common during the initial stage of fighting the FIP virus for cats to have upper respiratory infections. This would be treated with antibiotics as Panda was and then reveal possible FIP when the fever doesn't come down or quickly returns. I have not yet learned everything I can for preventive treatment. I have read from more than one source that the vaccine is only effective for cats that do not already have the coronavirus. Almost all cats from catteries or shelters will have the coronavirus.
2. If it is during the second stage that I would identify as the beginning of the effusion and second onset of a fever, I would still try the same protocol as quickly as possible. It wasn't even clear to us during the first week of her second fever and beginning of effusion that she was ill. Panda still played a lot and ate fine. She was a little sluggish and we initially thought she was gaining weight. We know better now. I

had never heard of FIP before this. I would now take the cat's temperature with a disposable rectal thermometer and hopefully know the difference in feel between fluid in the abdomen and a fat belly. Our vet confirmed a normal temperature for a cat is 102 degrees F.

3. If it is caught after a week long development of the effusion, as was the case with Panda, I would give her the vitamins/antioxidants, immunosuppressants, and feline interferon alpha. Chances of recovery are probably zero and do not merit the considerable expense and time required for imported interferon omega. We easily spent a couple thousand with vet visits, medicines, and vitamins/antioxidants, and homeopathic medicine. I would still not put the cat to sleep immediately because maybe he/she is within the 5% that do survive. We would again pursue supportive treatment up to the moment that the cat might be in pain and we would let the doctor determine that.

If you cannot afford such expensive treatment, don't feel guilty. We knowingly spent what we did with very little expectation that it would make any difference. Our vet had one cat survive with Prednisolone and hydration (subQ saline daily), so this was probably an older cat with a better immune system and maybe a genetic make up and breed that has more resistance. This has been absolutely heartbreaking for us. Panda was not just a cat. I hope the info I've included will help anyone in the same situation save some time looking for answers.