

Editorial Board

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A moral dilemma

Vets, perhaps even more than doctors, face frequent ethical challenges in their work. Having to make decisions for your patients via a third party (the owner/client) means that we have to make judgements and decisions not purely based on what is best for the patient, but on what is practical, expedient, compassionate and affordable. A less common conundrum is whether to deny an effective treatment to your patient when it may not be legally obtained.

Feline infectious peritonitis (FIP) is a virally-induced immune-mediated disease which results in the production and deposition of immune complexes leading to granulomatous or pyogranulomatous vasculitis. It occurs in two forms, wet (or effusive) FIP and dry (non-effusive) FIP. The disease is caused by a coronavirus. FIP is normally seen in cats under 2 years old.

Normally, the prognosis is hopeless. There is no recognised or licenced therapy. Attempts to discover a vaccine have been disappointing as the vaccine tends to make the FIP signs worse (a worry when we are hoping that vaccination is the escape route from the COVID-19 pandemic). Almost inevitably, a diagnosis of FIP can only lead to death or euthanasia. Various drugs have been used in an attempt to treat FIP — at best these may have achieved remission in a small proportion of cases. Because the diagnosis of FIP relies on immunohistopathology, pre-mortem diagnosis is difficult, and a combination of clinical signs, pathology and serology are used to gain a 'best guess'. This difficulty in confirming diagnosis may account for apparent recovery of sporadic cases in general practice, which is actually a different syndrome.

For the first time, a potentially effective treatment may exist. GS-441524 is a nucleoside analogue that terminates the RNA chain of viral RNA-dependent RNA polymerase. It is manufactured in the USA but is not commercially available to vets. A preliminary clinical trial showed very promising results (<https://doi.org/10.1177/1098612X19825701>). There were no controls and severe cases were not recruited. In total 24 out of 31 cats on the trial recovered, which is unprecedented.

The problem is that black market versions of this drug are being manufactured, mostly in China, and sold online. To try and circumvent drug legislation, they are sometimes marketed as nutraceuticals, which is clearly inaccurate. Production is unregulated, and carried out without approval of the patent holding company, Gilead Sciences, giving no guarantee as to the purity, content or safety of the product. Despite this, it is claimed that thousands of cats worldwide have been successfully treated.

It is easy to find companies supplying these drugs, and eminent vets have published treatment regimens online. Although costly, owners could obtain supplies for their cats. The Veterinary Medicines Directorate would be under no illusions that this product is a drug. As no licenced preparation exists, importation of GS-441524 is strictly illegal.

So, when a client, whose cat has FIP, asks you to help work out the dose and administer a wonder drug that they have obtained, where do you stand? Legally, you should report the client for importing the chemical. Morally, you have a mortally ill patient and potentially the means to not only make it feel better, but even to cure it. Professionally, a client is relying on you and may find it hard to understand a refusal. It may be best to consider your approach before the situation arises.

The twist in the tail: GS-441524 and a the very similar GS-5734 (remdesivir) seem to show the most potential for helping human COVID-19 cases (<https://doi.org/10.1016/j.onehlt.2020.100128>). Would it be morally acceptable to use a precious drug which could save human lives on our pets? **CA**



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