Effects of surgical versus hormonal neutering and routine vaccination on GS-441524 treatment for FIP - N. C. Pedersen

The problems associated with adverse sexual behavior in intact females and males on GS treatment have come to my attention. The questions often come from countries where neutering is either delayed to later in life or not a routine practice. The question about routine vaccinations is also commonly broached. The concerns are that stresses of spay/neuter surgeries and vaccines may affect GS-441524 treatment outcome. I believe that such fears are overblown. If a cat is on treatment and in remission, or has been deemed cured, it is ok to spay or castrate it, but preferably in the least stressful manner. Cats can be spayed and castrated quickly and efficiently and returned to their homes the same day (castrations) or within a day (spays) with a minimum of pre-surgical, surgical, and post-surgical drug treatments and restraints (e.g., caging, E-collars). Such surgeries will be less stressful to the cats (and owners, which then reflect back on their cats) than the sexual behaviors.

I am also not a fan of hormonal treatment to prevent adverse male or female sexual behavior and feel that efficient spaying and castration will be less stressful in the long run than such preventions. Therefore, if a need to permanently alter this behavior is required, surgical neutering is preferable to chemical neutering.

Is it better to spay or castrate cats when they still have some treatment left, providing they appear healthy and blood test results are normal? Yes, it makes sense to continue treatment during the period of these procedures. However, we have not recommended that cats in the post-treatment 12-week observation period be re-treated during surgical neutering. It is doubtful that such procedures will alter their FIP fate, because whether they are cured is determined at the end of treatment. The observation period is not to allow for further improvement, but to confirm a cure.

It appears that some owners want to keep treated cats intact for later use as breeding stock. We know that there are genetic as well as environmental components to FIP, which has led to the recommendation that purebred cats producing FIP kittens should not be used for breeding. This would be even more true for cats that have been cured of FIP.

As for vaccines, many already know that I am not a big fan of vaccines for cats after kittenhood and the first yearly boosters. I also feel that rabies vaccines cannot be justified for routine use in cats, either for the health of the public or the cats. Regardless, I accept that these beliefs are not widely accepted and that laws in a few states require rabies vaccination for cats. I have seen no consequences by routine vaccinations in any of our cured cats. However, they are not something I would recommend for cats undergoing treatment. The immune systems of these cats have other things to do than respond to vaccines.

What are the indications for medications other than GS-441524 for FIP treatment? - N. C. Pedersen

Questions frequently arise about the needs for supplemental medications to the GS-441524. Supportive (symptomatic) treatment may be needed during the initial illness to keep cats alive long enough for antivirals to have their effect. The drugs often used at this initial stage usually include an antibiotic (doxycycline/clindamycin), analgesics (opioids, gabapentin), antiinflammatories (corticosteroids, NSAIDS), immunostimulants (interferons, non-specific immunostimulants), and fluids. I have tried to avoid overuse of these drugs except on a temporary basis and only if there is strong justification for them, especially in severely ill cats for the first few days. The most important goal for treating FIP is to stop virus replication in macrophages, which will immediately halt the production of the numerous inflammatory and immunosuppressive cytokines that cause FIP signs. While some drugs such as corticosteroids (prednisolone) or NSAIDS (meloxicam) may inhibit inflammatory cytokines, the only drug that will completely inhibit these harmful cytokines are antiviral drugs such as GS-441524 or GC376. These drugs will cause dramatic improvements in fever, activity, appetite, etc. within 24-48 h. This improvement will be far greater than any achieved by other medications. Therefore, unless there is justification to use other drugs, they should be stopped as soon as a pronounced and steady improvement in FIP signs occurs. I am also not a believer in many of the supplements that are used by cat people. B12 only treats B12 deficiency and not the anemia of FIP. This also applies to a wide range of dietary supplements and specialty cat diet of many types. Stick to well tested commercial brands of cat food supplemented with animal meats.