

The Old Flea Story

By George Cuellar, DVM, Diplomate ABVP C/F

There is nothing that causes more awkwardness than to suggest a pet being examined has fleas or that their problem may be due to fleas. There is always some immediate pushback with a hint of “How dare you accuse me of not taking care of Fluffy”. It is as if any mere suggestion of fleas is somehow linked to poor pet care, bad owners, or lower socioeconomic status. The fact is that the products to control fleas are almost innumerable and are incredibly effective. There are so many flea products available in the market place that there is just not enough room for me to review them all. What follows is my own opinion about the products I know about and use. Many veterinarians will have their own views and approaches. In general over the counter products are effective and more toxic.

There are four species of fleas that we recognize: the cat flea, the dog flea, the chicken flea, and the human flea. Most of the fleas, probably over 90% on both dogs and cats is the cat flea. The rest are dog fleas. Chicken or poultry fleas are called “stick tight” fleas. These fleas do not move but instead bury their heads almost like ticks and are usually found on the faces of cats that go investigating the neighbor’s chickens. Human fleas have not been a problem in the modern era.

The life cycle of the flea was more important to understand control in the past. We do not routinely recommend environmental treatment any more. Current products not only kill fleas on pets but can also clear an environment of fleas.

Fleas are associated with many problems and some serious diseases in both pets and people. Since they feed on blood they are the natural transmitter of blood born infections. Very important diseases caused or transmitted by fleas are:

- Allergic dermatitis characterized by small scabs in cats and hot spots in dogs
- Subclinical to severe anemia caused by blood loss or transmission of *Mycoplasma* (feline infectious anemia).
- The transmission of *Bartonella henselae*, which causes cat scratch disease (CSD) in people and a recently implicated or associated directly or indirectly with a variety of clinical manifestations in cats, including fever, lethargy, enlarged lymph nodes, eye inflammation, and stomatitis.
- The tapeworms are transmitted when pets or people swallow a flea. These often appear like “moving” rice on the stool or around the fur on the anus.
- Cat fleas have been found to carry *Borrelia burgdorferi*, the etiologic agent of Lyme disease, but their ability to transmit the disease is unclear
- Other important diseases include endemic typhus, rocky mountain spotted fever, and plague

Following is a list of some of the available flea control. All veterinarians have their own biases and preferences for flea control. At the end I will comment on what I like to use. The key point to remember is consistency. Owners who only treat their animals once in a while will become disappointed and frustrated. Despite their claims, all of the topical spot-on do poorly when pets are frequently bathed or swim a lot.

Oral medications (Capstar®, Comfortis) work much faster than the topical spot on products.

Following is a list of the major products available:

Advantage®; Bayer works disrupting normal nerve transmission. It is not effective against ticks. Generally monthly application rate is recommended, however, in severe cases, every 3 weeks may be more effective.

Advantage II®; Bayer has the same characteristics as Advantage, with an insect growth hormone that has been shown to get into the environment on blankets etc. and disrupt the entire life cycle. Use of Advantage II® can deflea the environment in 3 months.

Advantix® or Advantix II®; Bayer must NOT be used in cats! It both kills fleas, lice, and ticks.

Advantage-Multi®; Bayer is new and approved for fleas, heartworms, intestinal parasites, and ear mites. It has been shown to be effective in the treatment of canine demodectic mange when applied weekly.

FrontlinePlus®; Rhône-Mérieux has efficacy against fleas and ticks. Generally a once monthly application rate is recommended, but for severe problem, every 3 weeks is better. Frontline is approved for dogs and cats.

Revolution®; Pfizer shows activity against heartworms, fleas, ear mites, sarcoptic mange, ticks and a variety of internal parasites. It has also been shown to be effective against biting and sucking lice. For severe problems, it can be used every 2 weeks. It is more effective on cats than dogs.

Capstar® Novartis is an oral tablet that kills adult fleas. It has a large safety margin in dogs and cats. Fleas start to die and fall from animals within 30 minutes. Capstar® offers an easily administered, very rapid flea kill with high degrees of safety. Recently it has been suggested that dosing at every other day is sufficient for long term control.

Comfortis®; Elanco is a tablet approved in both dogs and cats. While once monthly administration is recommended some dogs may need dosing twice monthly. Adverse effects include occasional vomiting. Comfortis has been shown to prevent infestations from a flea-contaminated home environments.

As a general rule I recommended Advantage II or Frontline plus for dogs. I like Revolution for cats because it works better. For dogs that are bathed often, I use Comfortis. For flea allergic dogs and cats that need absolute flea control, I use Capstar daily for 30 days then Monday, Wednesday, Friday long term. The key is to treat ALL the pets in the house, treat more often than monthly like every three weeks, and be consistent.

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