

25 years ago as I graduated from veterinary school and headed into the world of clinical practice. I believed there were some veterinary medical facts that were simply unalterable, written in stone, the foundation of our efforts to help animals. Some of those facts have indeed remained solidly unchanged-with one glaring exception. I always thought, and truly believed, that fleas (and the challenge of trying to control them) would be a clinical nightmare that would be around forever, at least well beyond the typical 30-40 year career of a veterinarian. After all, veterinarians before me had struggled for decades trying to find ways to rid pets of this insidious pest.

Today, while I can't actually say that fleas are no longer a problem for pets, recent developments in flea control products have definitely taken a giant step toward debunking one tenet of my early career.

Fleas, and the problems they cause, have challenged pet owners and veterinarians alike for hundreds of years, and no doubt have challenged helpless animals for millions of years. While most people are aware of the common itchy skin fleas can cause, some are surprised to learn that fleas can actually cause life-threatening illness. Let's remember that fleas feed on one thing-and only one thing-your pet's blood. It's not unusual in the summertime to see several cases of severe anemia (low red blood cell number) often called "flea anemia" as a result of those fleas treating an animal like a cheap lunch buffet. This happens when a dog or cat is so heavily infested with fleas-each one of them feeding regularly on the pet's blood-that the pet cannot make new red blood cells fast enough to make up for the loss. Fleas can also carry dangerous infectious diseases, and their penchant for sucking blood makes for an easy way to spread these diseases. Despite the potential life threatening consequences of uncontrolled flea problems, the most common problem is not dangerous. Without exception, itchy skin as a result of allergy to flea bites ranks as the most common flea related disease we see.

A common misconception is that a dog or cat is itchy because he/she is feeling the flea bite and tries to chew at the flea itself. While this may occasionally be the case, most times the pet is experiencing an allergic reaction to proteins in the flea's saliva. Each time a flea bites into the skin to take a blood meal it leaves a small amount of "flea saliva". This saliva is a potent allergen to most dogs and many cats. The most obvious symptom of this allergic reaction is intense itchiness; usually in the lower half of the body, especially the tail-base, groin, and hind legs. It only takes a few fleabites to keep a sensitive dog or cat itchy. This is also why some pets are very itchy from flea allergy while their owners (or the veterinarian) can rarely find any fleas. Don't think you have to see a flea on your pet to have a flea problem.

Sometimes the problem goes well beyond simple itchiness. Many pets will chew, scratch, and so irritate their skin that a bacterial infection takes hold. This infection in turn causes more itchiness and subsequently more chewing and scratching, and the vicious cycle escalates. Some of these animals are presented in such intense pain that they require sedation to clean and evaluate the problem areas. Thankfully, your veterinarian can control this problem relatively easily, but the ultimate resolution of the problem hinges on good flea control.

Had I been writing this column 14 years ago the discussion of flea control methods would probably fill the space of three monthly columns, and include products that are now banned by the EPA due to safety concerns. Circa 1996 two products hit the market that changed everything. Advantage and Frontline were introduced as monthly "spot-on" products that completely changed how we addressed the problem of flea control. These products, with their high levels of safety and effectiveness have helped an entire generation of dogs and cats.

Frontline and Advantage are now widely available from many sources. Veterinarians still carry them as well, though it can be hard to compete on price with large pet chains and superstores. Veterinarians feel the small added cost of products obtained from vet hospitals is a trade off for the unlimited support and advice you get about these products from your veterinarian. One can only wonder what a pet superstore would do if you had specific questions about the product, or thought your pet was having a reaction (very unlikely) to Advantage or Frontline you purchased from them. My guess is they'd probably send you to your veterinarian.

Be aware that not all "spot-on" products are Advantage or Frontline. For many years spot-on permethrin-based products have been available for flea control. These products, while attractive because of their low cost, have not proven as effective as Advantage or Frontline, and in my opinion are not as safe. So remember, there are no "generic" versions of Advantage or Frontline.

Advantage and Frontline have not solved all the flea problems out there. Some pet owners have used oral products called Program or Sentinel that contain the drug Lufenuron. These prescription products don't directly kill adult fleas, but instead limit the development of the flea egg, and thus limit flea populations in the home or yard.

The latest development in dog flea control is very exciting. Comfortis is a monthly, prescription, oral flea control product-for dogs only- that does kill adult fleas very effectively. This product has gained popularity with owners of dogs that swim or are bathed frequently as those activities will potentially remove the topically applied Advantage and Frontline to some degree. Also, some families do not want a chemical on their dog's skin and coat where it can come in contact with people (especially children). Finally, Comfortis has gained some fans at the Dermatology department at the Veterinary Medical Teaching Hospital at UC Davis.

There's no question that the last decade and a half have been banner years in our fight against the pesky flea. Despite these great products being available, we still see pets with fleas and flea related disease. Hopefully as more pet owners understand how relatively easy it is to control this problem, their pets will enjoy a more healthy, comfortable, and enjoyable lifestyle.

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