

FLEA BITE ALLERGY

About the Diagnosis

When a dog or cat has fleas, the degree of itchiness and discomfort is often very different from one individual to the next. This variability exists because some dogs and cats are allergic to flea bites whereas others are not. Flea bite allergy (flea bite dermatosis, flea allergy dermatitis, flea bite hypersensitivity) is a common skin condition in dogs and cats. It occurs when a flea bites an animal that is allergic (**hypersensitive**) to one or more proteins (**allergens**) in the flea's saliva. Nonallergic animals usually develop mild itchiness at the site of a flea bite for a brief time after the flea bite. However, animals with flea bite allergy can develop intense itchiness anywhere on the body that progressively worsens with continued exposure to fleas, leading to hair loss and other skin problems. One or two flea bites per week can be enough to trigger and perpetuate an allergic reaction. Animals of any age can develop flea bite allergy, but it is typically seen in animals that are 1 to 5 years old. It most often occurs in the summer but can occur year-round in more tropical or subtropical climates since warm weather favors flea reproduction.

Veterinarians often diagnose flea bite allergy based on symptoms, evidence of fleas in the hair coat, and improvement of the animal's symptoms with treatment. Evidence of fleas consists of finding adult fleas, flea dirt (brown-black specks that consist of flea excrement containing digested blood) and/or flea eggs (white specks) on the affected pet or other pets in the household. Animals with flea bite allergy often have only a few fleas or sometimes no fleas at all because the fleas are often dislodged as a result of the animal's excessive scratching, chewing, and licking of its skin. For these suspect cases where fleas are not found, an intradermal skin test and a blood test are available to help confirm a diagnosis of flea bite allergy, but these tests are not 100% accurate. A positive result confirms flea bite allergy, but an animal that tests negative on either test could still have flea bite allergy in some instances. Other tests may be necessary to eliminate other causes of skin disease and itchiness because several types of skin diseases can produce a similar degree of itchiness but require entirely different forms of treatment.

Living with the Diagnosis

Dogs: Symptoms of flea bite allergy can be variable in degree, from very mild to severe, and generally worsen as the dog ages. The symptoms are entirely skin-related. Areas of skin most often affected are on the lower back, tail head, hind legs, and belly, although the dog's entire body may be affected in severe cases. The affected skin is very itchy and may have small bumps, scabs, abrasions, redness, and hair loss; it may become infected with bacteria. Some dogs may develop a "**hot spot**" lesion (acute moist dermatitis), which is a well-demarcated patch of very inflamed, moist, hairless skin caused by the animal's excessive chewing, licking, and scratching of that particular area. The animal's skin may thicken and darken from repeated scratching and chewing.

Cats: Symptoms of flea bite allergy can be variable in cats. Cats may have a skin lesion pattern similar to dogs but more often develop little bumps and scabs around the head, neck, and belly (**miliary dermatitis**). Some cats develop a round, reddish-yellow plaque (**eosinophilic plaque** or **granuloma**) on the groin area, belly, or inside part of the hind legs. The affected skin is usually very itchy; cats may scratch and or lick these areas of skin excessively, causing hair loss. Some cats have a symmetric loss of hair affecting the mid to lower back and hind legs, with no other obvious signs of skin irritation (**symmetric alopecia**).

TREATMENT

Treatment and prevention of flea bite allergy consists of taking measures to prevent the allergic pet from being bitten by fleas. This usually requires the elimination of fleas from the flea allergic pet, the pet's immediate environment (yard, house), and other dogs and cats in the household with products that kill the adult flea (adulticide therapy) and prevent fleas from reproducing (insect growth regulators, borax products). Flea collars are usually not effective. Your veterinarian may also prescribe anti-inflammatory medication (e.g., corticosteroids, antihistamines-usually given orally) on a short-term basis to decrease the allergic response in the skin and provide immediate relief from itchiness. Orally administered antibiotics may be needed if there is a bacterial infection (**pyoderma**). Much less preferable is the long-term use of anti-inflammatory medication, which is associated with greater negative side effects. In rare cases, such treatment is used if it is not possible to prevent exposure to fleas.

DOs

- Consult with your veterinarian about treatment options for your pet (several excellent, safe products recently on the

market) and home/yard (self-care, professional exterminator, alternatives to insecticides).

- Use insecticides according to directions and with caution around pets and people.

DON'Ts

- Do not use flea products containing "Permethrin" on cats (potentially toxic).
- Do not apply flea products designed for the environment on animals directly.
- Do not assume fleas are not the problem just because no fleas are seen.

When to Call Your Veterinarian

- If the condition does not improve with appropriate treatment.
- If your pet has a reaction to any medication(s) or flea product(s). Signs of a reaction may include: drooling, vomiting, hives, abnormal behavior, restlessness, increased itchiness, and hair loss or irritation of the skin where a flea product was applied.

Signs to Watch For

- Fleas, flea dirt, or flea eggs on an affected pet, the pet's bedding, or other pets in the household; a flea comb can be very helpful in finding evidence of fleas on the pet.
- New bumps or scabs on the pet's skin; these may indicate a recurrence of the allergy.

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