

Hurricane Animal Hospital  
One Davis Court  
Hurricane, WV 25526  
304-562-3321  
www.hurricaneanimalhospital.com

## Fleabite Allergic Dermatitis

*This information leaflet is provided as a method of communication between veterinarians and clients who own a dog with Fleabite Allergic Dermatitis (FAD). It is designed to inform you about the causes, signs, diagnosis, and treatment of this chronic and recurrent allergic skin disease. If you have any questions, be sure to ask your veterinarian to answer them for you.*

Fleabite Allergic Dermatitis (FAD) is the major cause of skin problems in dogs living in areas of the country with high humidity and moderate temperatures. Because fleas linked to this disorder are unlikely to hatch outdoors in cold weather in winter, dog owners often refer to FAD as "the summer itch." In climate zones with mild winters, however, FAD, can be a year-round problem.

### **Cause**

An allergy can be defined as a hypersensitive reaction to an "allergen" or "antigen" which is the allergy-causing substance. The allergen in FAD is one of the components in flea saliva. Fleabite Allergic Dermatitis, like most allergies, can develop at any age, and the signs can appear quite suddenly.

Dermatitis can be defined as an inflammation of the skin caused by tissues responding to injury. Generally, signs of pain, heat, redness, swelling, and loss of function characterize dermatitis.

### **History and Clinical Signs**

Dogs with FAD itch intensely. Even the presence of a single flea on these dogs can cause great discomfort. The skin of an affected dog becomes hot, reddened and swollen. Because these areas are painful, affected dogs scratch and lick themselves. Secondary bacterial infections may develop from this scratching and licking, resulting in pus, dried crusts, and loss of hair. If untreated, the dogs skin becomes thickened, blackish, and bald, and the itching may diminish. Fleabite Allergic Dermatitis most commonly affects areas of skin over a dog's lower back and tail head, inside the hind legs, and on the abdomen below the pelvis.

### **Diagnosis**

The diagnosis of FAD is based primarily on the history, clinical signs (including evidence of fleas), areas of the dogs skin affected and the response to eliminating fleas on the dog and in the dog's environment. A diagnostic intradermal

skin test is also available, although it is seldom needed to make a diagnosis of FAD. This test proved for use on dogs, and use them according to the directions on the labels.

- *Treating severe itching.* Corticosteroids or antihistamines may be prescribed by your veterinarian to help treat your dog's severe itching problems. These drugs help break the "itch-scratch" cycle. Potent chemical agents, these drugs should not be used for long periods of time. A dog should be given the smallest amount possible that will still control the itching. Never abruptly stop the dosage, but gradually wean the dog off the drug by decreasing the dosage.
- *Treating secondary infections.* Antibiotic tablets may be required if a skin infection is present. It is important to finish the entire course of antibiotic treatment prescribed by your veterinarian. Medicated shampoos may also be prescribed. Although FAD is a major problem for owners of the affected dog, treatment is possible. The disease may be prevented if the fleas can be eradicated. If eradication is not entirely possible, however controlling the fleas as effectively as possible and using medical therapy to relieve the symptoms of the allergy may treat FAD.

## **Glossary**

Allergen-allergy-causing substance

Antigen-substance that induces an immune response

Antihistamines-drugs used in the treatment of allergy symptoms

Biopsy-the process of removing tissue from living patients for diagnostic examination

Corticosteroids-a steroid containing drug

Debilitated-weakened

Dermatitis-inflammation of the skin

Hypersensitive-a condition in which the response to a stimulus is excessive in degree

IGR-insect growth regulator, a substance that alters immature flea growth leading to death

Insecticidal-containing an agent that kills insects

Intradermal-within the substance of the skin

Larva-worm-like form of an insect evolve from the egg

Metamorphosis-change in form, structure, or function

Ovoid-egg-shaped

## **Review:**

*Fleabite Allergic Dermatitis (FAD) is the major cause of skin problems in dogs that live in the areas of the country with high humidity and moderate*

*temperatures. Cold weather kills some of the fleas, which cause this disease, however, in warm climates, FAD can be a year-round problem.*

*The allergen responsible for FAD has been traced to a component in flea saliva. Dogs with FAD will itch intensely. The skin of affected dogs becomes hot, reddened, and swollen. Secondary bacterial infections may develop, resulting in pus, dries crusts and loss of hair.*

*The diagnosis of FAD is based on the history, signs, and areas of the dog's skin affected. Skin scrapings, fungal, and bacterial cultures and diagnostic intradermal tests may be required in some cases to help rule out other skin diseases.*

*Like all allergies, FAD is an incurable disease, however, it is treatable. Treatments include: fumigating to eradicate fleas; applying insecticidal products on affected pets; using prescribed corticosteroids or antihistamines to treat severe itching; and administering antibiotics to treat secondary infections.*

*Fleas live and feed on their host. The fleas feed by sucking blood from the dog, which can lead to anemia in young children or debilitated dogs. Therefore, it is important that fleas are eradicated for the overall health and welfare of the dog.*