BRIARPOINTE VETERINARY CLINIC



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FELINE ALLERGY

What are allergies and how do they affect cats?

One of the more common conditions affecting cats is allergy. An allergy occurs when the cat's immune system "overreacts" to foreign substances called allergens or antigens. Those overreactions are manifested in one of three ways. The most common manifestation is itching of the skin, either localized in one area or a generalized reaction all over the cat's body. Another manifestation involves the respiratory system and may result in coughing, sneezing, and wheezing. Sometimes, there may be an associated nasal or ocular (eye) discharge. The third manifestation involves the digestive system, resulting in vomiting, flatulence or diarrhea.

How many types of allergies are there and how are they each treated?

There are four known types of allergies in the cat: contact, flea, food, and inhalant. Each has common clinical signs and unique characteristics.

Contact Allergy

Contact allergies are the least common of the four types of allergies in cats. They result in a local reaction on the skin. Examples of contact allergy include reactions to flea collars or to types of bedding, such as wool. If the cat is allergic to such substances, there will be skin irritation and itching at the points of contact. Removal of the contact irritant solves the problem. However, identifying the allergen can be challenging in many cases.

Flea Allergy

Flea allergy is the most common allergy in cats. A normal cat experiences only minor irritation in response to flea bites. The flea allergic cat, on the other hand, has a severe, itch-producing reaction when the flea's saliva is deposited in the skin. Just one bite causes such intense itching that the cat may severely scratch or chew itself, leading to the removal of large amounts of hair.

There will often be open sores or scabs on the skin, causing a secondary bacterial skin infection. The area most commonly involved is over the rump or base of the tail. In addition, the cat may have numerous, small scabs around the head and neck. These scabs are often referred to as *miliary lesions*, a term which was coined because the scabs look like millet seeds.

The most important treatment for flea allergy is to eliminate all fleas. Therefore, strict flea control is the backbone of successful



treatment. Unfortunately, this is not always possible in warm and humid climates, where a new population of fleas can hatch out every fourteen to twenty-one days. However, the new topically applied monthly flea products such as Revolution® may kill fleas before they have a chance to bite your cat. In addition, injections of corticosteroids, also referred to as "cortisone" or "steroid shots", can be used to block the allergic reaction and give immediate relief. This is often a necessary part of dealing with flea allergies. Fortunately, cats appear relatively more resistant to the side-effects of steroids than other species. If a secondary bacterial infection occurs, appropriate antibiotics must be used.

Inhalant Allergy

Inhalant allergy or atopy is another type of allergy in cats. Cats may be allergic to all of the same inhaled allergens that affect us. These include tree pollens (cedar, ash, oak, etc.), grass pollens (especially Bermuda), weed pollens (ragweed, etc.), molds, mildew, and the house dust



mite. Many of these allergies occur seasonally, such as ragweed, cedar, and grass pollens. However, others are with us all the time, such as molds, mildew, and house dust mites. When humans inhale these allergens, we express the allergy as a respiratory problem. Atopy in humans is sometimes called "hayfever." The cat's reaction, however, usually produces severe, generalized itching.

Most cats that have an inhalant allergy are allergic to several allergens. If the number of allergens is small and they seasonal, itching may last for just a few weeks at a time during one or two periods of the year. If the number of allergens is large or they are present year-round, the cat may itch constantly.

Treatment depends largely on the length of the cat's allergy season. It involves one of two approaches.

The first approach involves the use of steroids and shampoos. Steroids will dramatically block the allergic reaction in most cases. These may be given orally or by injection, depending on the circumstances. As stated previously, the side-effects of steroids are much less common in cats than in people. If steroids are appropriate for your cat, you will be instructed in their proper use. Some cats are helped considerably by a hypoallergenic shampoo. It has been demonstrated that some allergens may be absorbed through the skin. Frequent bathing will reduce the amount of antigen exposure through this route. In addition to removing surface antigen, bathing alone will provide some temporary relief from itching and may allow the use of a lower dose of steroids.

A potentially significant but fortunately rare side effect of steroid injections is the development of diabetes. This occurs only rarely and may result in temporary or permanent diabetes. There is not way to tell in advance which cats may be predisposed to this side effect, and it may occur on the first or any subsequent injection.

The second approach to inhalant allergy treatment is desensitization with specific antigen injections or "allergy shots". This is not to be confused with injections of corticosteroids. Once the specific sources of allergy are identified, very small amounts of the antigen are injected on a regular schedule. This is in an attempt to reprogram or retrain the body's immune system. It is hoped that as time passes, the immune system will become less reactive to the problem-

causing allergens. If desensitization appears to help the cat, injections will continue for several years. For most cats, a realistic goal is for the itching to be significantly reduced in severity. In some cats, itching may completely resolve. Steroids are not used with this treatment protocol, except on an intermittent basis. On average, approximately half of the cat's receiving desensitization therapy will experience a significant decrease in their clinical signs. This therapeutic approach is usually recommended for the middle-aged or older cat that has year round itching caused by inhalant allergy. This approach is not used with food allergy.

Although desensitization is the ideal way to treat inhalant allergy, it does have some drawbacks and may not be the best choice in certain circumstances.

Cost: This is the most expensive form of treatment.

Age of Patient: Because many cats develop additional allergies as they get older, young cats may need to be retested one to three years later.

Success Rate: About 50% of cats will have an excellent response. About 25% get partial to good response. About 25% get little or no response. The same statistics are true for people undergoing desensitization.

Time of Response: The time until apparent response may be two to five months, or longer. **Interference of steroids:** Cats must not receive oral steroids for two weeks or injectable steroids for six to twelve weeks prior to testing. These drugs will interfere with the test results.

Food Allergy

Cats are not likely to be born with food allergies. More commonly, they develop allergies to food products they have eaten for a long time. Food allergies are now estimated to be the second leading cause of allergic dermatitis in cats. The allergy most frequently develops in response to the protein component of the food; for example, beef, pork, chicken, or turkey. Food allergy may produce any of the clinical signs previously discussed, including itching, digestive disorders, and



respiratory distress. Food allergy testing is recommended when the clinical signs have been present for several months, when the cat has a poor response to steroids, or when a very young cat itches without other apparent causes of allergy. Testing is done with a special hypoallergenic diet. Because it takes at least eight weeks for all other food products to get out of the system, the cat must eat the special diet exclusively for a minimum of eight to twelve

weeks. If a positive response occurs, you will be instructed on how to proceed. *If the diet is not fed exclusively, it will not be a meaningful test.* We cannot overemphasize this. NO table food, treats or vitamins can be given during the testing period.

Because cats that are being tested for inhalant allergy generally itch year round, a food allergy dietary test can be performed while the inhalant test and antigen preparation are occurring.