

ALLERGIC PETS

SIGNS: Itching, scratching, biting, licking, rubbing against floors and furniture, red skin, hairless, flaky skin, oily skin, scales, rashes, papules (little red bumps). Anywhere on the body. Atopy tends to be mainly feet, face, ears (some animals show only chronic or repeated ear infections), eyes, skin folds. Food allergies can be extra apparent around the anal area, and face. Flea bite allergies concentrate on the rump, abdomen, thighs, and tail and occasionally around the neck (especially in cats).

CAUSES:

1. Atopy: molds, mildews, trees/grasses/other plants, dust/ dust mites, cat/ dog/ horse saliva/ dander (e.g., in cats, it's the saliva, which they lick all over themselves and then the dander, with the saliva on it, gets all over the place), feathers, smoke, material fibers.

2. Foods: meat/ poultry/ fish, grains are the most common, but any food can cause allergies.

3. Contact: carpet freshener powders, flea products, poison ivy/ sumac, bacteria, yeast, fleas, detergents, perfumes, some drugs.

DIAGNOSIS:

1. History of exposure, seasonal or year around problem.

2. Locations on the pet with symptoms.

3. Lab tests:

A. skin scraping: to rule out parasites

B. skin cytology of the skin surface: to rule out yeasts and bacteria as complicating factors

C. skin biopsies: to rule out autoimmune diseases, like lupus and pemphigus, and hormonal conditions

D. response to medications: steroids of the cortisone type should give a great deal of relief if allergy is the only problem, but will cause worsening of other conditions

E. specific allergen testing

ALLERGEN TESTING

1. Food trials: feeding the special diet for about 3 months with NOTHING else added in the way of treats, table foods, and some medications, and then judging the response or lack of response. Theoretically, the easiest and cheapest to do. In practice, people often have a hard time not feeding extras and each time they do, the food trial has to start over. Two ways to do:

A. novel ingredients: this means finding a diet that has ingredients the animal has never been exposed to before. Usually this means a prescription diet. Ingredients are very limited, i.e. only 1 meat source and 1 grain/ vegetable source per diet. Moist commonly involve rabbit, venison, duck for dogs and cats, whitefish or kangaroo for dogs, and lamb for cats. Most commonly potato or rice for dogs, but oatmeal is sometimes used, and for peas for cats.

B. hydrolyzed proteins. Under the theory that a protein chain must be big enough for the body to see it and fight against it, if the chains are chemically broken down to smaller chains, then the animal can eat something that should cause a reaction if not for the food treatment. These tend to be quite expensive due to the extra

processes involved in making the food. Useful for when a pet will only eat a certain ingredient or has become allergic to a wide variety of foods.

2. Skin testing: a liquid version of the allergen is injected into the skin and a response is judged based on swelling and redness at the site. Requires going to a dermatology specialist and shaving the sides of the chest so they can see the skin. Some pets need sedation/ anesthesia to do this. All pets must be completely off medications pre-testing, as long as 6 weeks, which, in some cases is impossible to do without getting serious damage from the itching. Usually costs about \$250-\$500 depending on what all is done. Considered the gold standard of testing, but doesn't work well for food and can (rarely) have false negatives. Extremely rare to have a false positive reaction.

3. Serum/ blood testing: we draw some blood and send to lab for testing. The allergens are bound to a clotting agent and when added to the pet's serum, they bind to the pet's antibodies and clot. Non-reacting material is washed away, and the clot-like spots are read to see which allergens are involved. Said to be able to test foods this way, but many feel the only certain way to test food is with a food trial. Can get false positives and rarely false negatives. Cost runs \$175 to \$300 depending on number of allergens tested.

TREATMENT

1. symptomatic

A. steroids of the cortisone type are usually needed. These drugs cause increased drinking and urinating, sometimes increased appetite, and can decrease the immune system's ability to fight infections. Long term use can affect liver, kidney, bone, skin. Most often used for seasonal allergies of 1 to 2 month's duration. It is very cheap, so some people use it all year long in those animals with year round allergies, altho this is not recommended. Drugs include prednisolone/ prednisone, triamcinolone, dexamethasone orally/ injectable, DepoMedrol (long acting pred for cats and the occasional dog that cannot be medicated any other way) injectable, and hydrocortisone, triamcinolone, dexamethasone, betamethasone, mometasone topically.

B. Atopica (cyclosporine) is a drug starting to be used more. It is an immune suppressant. Used in high doses for cancer, we have found that low doses work for allergies and have less side effects for long term use than steroids do. Biggest side effect is that about 30% of animals will get nausea and vomiting/ diarrhea in the first week or so and hence we often send anti-nausea meds home with. This drug is very expensive, however.

C. anti-histamines alone rarely work, but can be used to help reduce the need for the steroids. In some cases, can cause drowsiness, but not usually. Drowsiness can actually be helpful at nite if the pet (and then the owner!) can't sleep well. Most are over the counter, as well as prescription. At higher doses for larger dogs, it may be cheaper to give the prescription than give multiple pills of the over the counter one. Drugs include Benadryl (diphenhydramine), Chlortrimetron (chlorpheniramine), Tavist (clemastine), Atarax (hydroxyzine), Allegra (fexofenadine), Zirtec (cetirizine), Clarinex(desloratidine). It may be necessary to try a variety to see which works best in your pet. Consult the doctor for doses. Be sure to buy plain anti-histamines without any decongestant or pain reliever.

D. anti-leukotrienes. These drugs bind to inflammatory cells and do not let them release their proteins/ enzymes that would bring in other inflammatory cells. In other words, if the invitations aren't sent, no one will come to the party. They can be

costly. Most commonly used in cats, who can get allergic asthma. Drugs include Singulair (montelukast) and Accolate (zafirlukast). Neutriceutical version is Duralactin. Duralactin for dogs is a vanilla chewable. For cats, it comes as a capsule (opened into food, or "pilled") and a liquid that also contains some omega 3.

E. omega 3: this is a fatty acid. Also written as eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Marine fish oil (usually salmon---*not* cod liver oil) or flax, but marine fish oil is better. Comes as liquid capsules, liquids, soft powders, chewable. This takes a few weeks to kick in, so for seasonal allergies, it helps to mark your calendar to start the month before the usual allergy season starts.

F. shampoos: most often oatmeal based, since oatmeal itself can reduce itching temporarily. Allergens in the air and surfaces get on the skin and irritate the skin and then can work their way INTO the skin. So, bathing them off is helpful. Need to use a soap free shampoo so you don't dry out the pet's skin, as many get bathed as much as daily. Contact time is essential, usually about 10 to 15 minutes is most often recommended. Even rinsing, especially when the problem is mostly feet, can be helpful, and for cats, wiping with a fairly damp cloth every day if they won't allow a bath.

G. topicals: useful if the itching is localized. Contain anti-histamine, steroid, antibiotic, anti-yeast, topical anesthetic in various combinations.

F. anti-biotics: used only if there is a secondary skin infection from all the itching.

H. anti-yeast/ anti-fungal: some pets whose allergies usually are seasonal may appear to be year round because all the itching can cause oiliness, which allows yeast to overgrow, which will continue the itching long after the allergy season is over.

I. herbal/ homeopathic treatments: I keep reading about butterburr, but have been totally unable to find doses for it's use. I am not as familiar with these and if something new comes along, I will contact some herbal/ homeopathic specialists about it.

2. avoidance: don't feed the offending food anymore or use products known to cause the contact allergy. For airborne allergens, avoidance is nearly impossible, even if you move. Remember that people used to be told to go to Arizona to avoid a lot of the pollens and molds around here, but because people there are growing lawns, etc instead of staying with native desert plants, this doesn't work anymore.

3. desensitization: the so-called "allergy shots". You need to have the pet tested first so we know which allergens to use. We start with very low doses and work our way up to the highest tolerable level and the least frequency that works. Some pets simply cannot be desensitized---there simply is no tolerable level. Some pets can be partially sensitized, in that they are better but may still need some meds. Some pets can be completely desensitized. In the old days, it was thought that you would need desensitization shots for life, but we are finding that sometimes this is not necessary.