

My dog has skin allergies – what should I do?

By Dr Gretta Howard – Senior Veterinarian

Skin allergies in dogs are really common and can be a source of frustration for both the dog, who is uncomfortable and itchy, and the owner, who has to deal with it.

Dogs with allergic skin disease get itchy skin, which can include some or all of the following clinical signs:

- 1) Recurrent ear infections (shaking head, discharge)
- 2) Excessive licking of the paws
- 3) Itchy tummy
- 4) Rubbing muzzle along the ground

What is the cause of my dog's skin allergies?

To get to a diagnosis, it's important to firstly rule out a couple of other important causes of itchy skin in dogs, including fleas and food allergy.

Fleas

In the Upper North Shore region, it is best to use a flea and tick preventative for your dog that has been recommended by your veterinarian, such as the Bravecto chew every 3 months or the Simparica chew monthly. These preventatives should be used all year round and remember to treat all dogs and cats in your household. Cats should be treated with Bravecto topical spot-on every 2 months. Some dogs are highly allergic to fleas which means that just one flea bite every two weeks can keep your dog extremely itchy. These dogs tend to have hair loss around the tail base in the lower back area.

Food allergy

Food allergies account for 5% of the causes of itchy skin in dogs, so 1 in 20 dogs that are itchy are itchy because of their food. Food allergies usually occur to a type of protein eg chicken or beef, rather than to a particular brand of food. So simply changing food brands won't work. Furthermore, even if your dog has been on the same food all along, a food allergy can still develop to a protein within that food. Diagnosis involved a **food elimination diet trial** for 8 weeks with either a novel protein diet or a hydrolysed prescription hypoallergenic diet recommended by your veterinarian.

Novel protein diets

· Prime 100 rolls including crocodile and tapioca, wild boar and pumpkin, duck and sweet potato or kangaroo and pumpkin (available at Turramurra Veterinary Hospital)



- Other non-commercial human-grade meats that can be used for the trial period are goat, rabbit or camel meat mixed with sweet potato or pumpkin (sourced from specialised butchers)
- · Hills d/d dry food venison & green pea recipe

It is important to choose a protein that your dog has not had before.

Hydrolysed diets

- · Royal Canin Anallergenic (dry food)
- Hill's Z/D (dry or wet food)

These diets have made their proteins so small through a process of hydrolysation that an allergic response is unlikely (available at Turramurra Veterinary Hospital).

While on the food elimination diet trial, it is important to stop giving flavoured worming tablets or flea and tick preventatives and instead, administer the 3-monthly products prior to starting the new diet. No treats or leftovers should be used during the trial period.

Once the 8 week trial has been completed, a **rechallenge** with the previous diet will quickly identify whether your dog had a food allergy as he or she will start scratching again within a few days. If your dog was itchy throughout the food elimination diet trial then it is likely that food was not the cause of the clinical signs and food allergy can be ruled out.

Atopy

Skin allergies due to environmental allergens is called **atopic dermatitis** or atopy and usually start in dogs aged between 1-3 years of age. Sometimes, but not always, atopy is inherited.

Once flea allergy and food allergy have been ruled out, the diagnosis of atopic dermatitis can usually be made. Atopy is a hypersensitivity or over-reaction to substances in the environment such as mould spores, house dust mite or plant pollens due to a defect in the skin barrier.

This 'leaky' skin barrier allows water loss through the skin and an increased penetration of irritants and potential allergens as well as an increased susceptibility to infection. Atopic dermatitis is a lot more common than food allergy.

Contact allergy

Direct contact allergies in dogs are less common than previously thought. In the past, many backyard plants have been attributed as the cause of skin allergies, when in fact multiple allergens are probably more likely. For this reason, removing plants from your garden is probably a waste of time and energy, unless you have firm evidence of a contact allergy.



What anti-itch treatments are available for my dog?

Initially, finding out the cause of your dog's skin allergies is not necessarily the primary focus, particularly if your dog is uncomfortable. Generally, it is more important to start by stopping the itch cycle and ensuring your dog is comfortable, then later, once the allergies are more under control, the cause can be investigated and managed more appropriately.

There are many treatment options to keep your dog with skin allergies comfortable.

Shampoos

Oatmeal-based shampoos (Nutriderm, Aloveen) have natural anti-inflammatory properties and are gentle on the skin, whereas medicated shampoos (Mediderm, Malaseb) are appropriate for dogs that have secondary infections.

Corticosteroids

Oral corticosteroids have a strong anti-inflammatory action and are appropriate in dogs with severe allergies where they are traumatising themselves through excessive scratching, or dogs with severe ear infections secondary to allergies. Not all dogs tolerate corticosteroids, so it is important that there are no underlying health disorders which may make corticosteroids contraindicated. Generally corticosteroids are for short-term use, or if long-term, it is important to get down to a very low dose such as twice a week to prevent side effects.

Topical corticosteroids, such as Elocon or Neocort, can be used if there are focal lesions to treat.

Apoquel

Apoquel (oclacitinib maleate) is an oral daily tablet that blocks the cytokines that drive dogs to itch, providing instant relief. It can only be used in dogs over 12 months of age and is contraindicated in dogs with a history of cancer. Apoquel is usually ineffective for cases of allergies involving ears.

Cytopoint injections

Cytopoint (lokivetmab) is a biological treatment which administers antibodies to the cytokine called interleukin 31 (IL-31), which is known to have an increased expression in dogs with atopic dermatitis. By using antibodies against this cytokine, atopic dogs can have relief from the drive to constantly scratch. The injection lasts approximately 4-8 weeks and has variable efficacy.

Cyclosporine

Cyclosporine is another oral treatment option that can be used long term in atopic dogs to prevent the inflammation associated with skin allergies. It can take up to 4 weeks to become effective but generally have less side effects than prednisolone.



Note it is important for dogs on long term prescription medications to have a blood screen regularly to monitor for any potential side effects or underlying problems.

Diagnosing and treating secondary infections

Dogs with skin allergies tend to have a high incidence of skin infections, because the skin and ears become inflamed, providing the perfect conditions for micro-organisms such as yeast and bacteria to thrive. These secondary infections actually increase the irritation and itch further, so it is vital to treat secondary infections with anti-microbials to break this cycle.

Cytology

Diagnosis of secondary infections is done in the majority of cases through cytology and in some cases through culture. Cytology takes a sample of the surface of the skin or inside the ear using a piece of tape or cotton bud and is examined under the microscope to look for bacteria or yeast. Depending on the type of organisms seen, oral anti-microbials can be prescribed.

Culture and sensitivity testing

In cases where a resistant or serious bacterial infection is suspected, or if dermatophytosis (ringworm) is possible, then a culture is performed. A bacterial culture takes approximately 2-3 days, whereas a fungal culture can take up to 3 weeks. The anti-microbial therapy can be then targeted according to the results.

Treating the underlying cause of atopic dermatitis

Intra-dermal skin testing and immunotherapy are available for dogs with atopic dermatitis via a veterinary dermatologist. Once the dermatologist finds out which allergens are causing the clinical signs, a vaccine can be made specifically for your dog to try to desensitise him or her to these allergens over a 1-2 year period.

A veterinary dermatologist is trained in treating more complex skin cases where routine therapies have not been successful in managing your dog's clinical signs. Simply ask one of our vets for a dermatologist referral to pursue more specialised diagnostics and treatment.