



ATOPIC DERMATITIS

What is Atopic Dermatitis?

Atopic dermatitis is a genetic condition that causes excessive levels of antibodies in the blood and also a poor skin barrier. Therefore normal environmental proteins e.g. pollen are able to get through the poor skin barrier and cause a reaction by the extra antibodies. The pet then becomes very itchy and the skin becomes inflamed. The most common environmental proteins that will affect your dog are house dust mites, bacteria and yeast that live on the skin or pollens from trees, weeds or grasses. The breeds most commonly affected are Westies, Cairn terriers, Golden and Labrador retrievers, Boxers, Irish and English setters, Bulldogs, Sharpeis, Dalmations, Lhasa Apsos and German Shepherds. Signs usually develop when your dog is 6 months to 3 years of age although occasionally they can develop later than this.

Clinical signs:

The main clinical sign of atopic dermatitis is itchiness which will vary in severity depending on how bad the disease is and the time of year. More subtle signs are chewing at paws, rubbing the face, shaking their head and scratching their ears. In worse cases dogs are constantly itchy and will scratch under their arms and in their groin. This will often lead to recurrent ear infections, waxy ears, brown saliva stained paws and rashes on their stomach.

Diagnosis:

There is no specific test for atopic dermatitis. In order to reach the diagnosis all other causes of itchiness need to be ruled out. The first major cause of itchiness is ectoparasites i.e. fleas and mites. Unless your dog is on monthly flea and mite treatment we will need to rule out parasites with skin scrapes, hair plucks and possibly skin biopsies. If these come back negative then all causes of itchiness by parasites have been ruled out. The second possibility is an allergy to food which affects 25% of itchy dogs. Skin signs are the most common problem however your dog may also have slightly loose stools or may occasionally go off their food or be sick. In order to rule out a food allergy we have to perform a diet trial. This requires your dog to eat only one type of food for 6 weeks and this diet needs to be a protein they have never had before or a hydrolysed diet where the protein has been broken down into very small molecules. If there is no response to the diet trial then a diagnosis of atopic dermatitis can be made.

Treatment:

The treatment initiated will depend on the severity of the signs. If your dog only shows signs at certain times of the year which are relatively mild then we may be able to manage the flare ups, however if your dog is itchy all year round then we will need to take further steps to keep them comfortable.

1. **Immunotherapy** – This is the only possibility for a cure for your dog. We will take a blood sample to quantify the level of antibodies in your dog's blood against several antigens e.g. dust mites. This will tell us what specifically your dog is allergic to and then a vaccine can be produced and given to your dog to help de-sensitise them to the allergen i.e. the body no longer reacts to the allergen. These injections need to be administered under the skin which



we can do at the clinic or some owners are happy to do at home. Immunotherapy will make a good improvement in 50-75% of dogs.

2. *Anti-itching drugs.*

There are 2 main types of drugs that reduce itching –

- **Glucocorticoids (steroids)** – These are almost 100% effective at reducing itching and inflammation in your dog's skin and they work very quickly. They however do cause problems with the liver if used long term. These side effects are reversible though so it is safe and effective to use steroids in dogs that only need short courses throughout the year. In dogs on steroids long term we try and use the lowest effective dose and try and go to every other day dosing.
- **Atopica (cyclosporin)** – Is a licensed product for treating atopic dermatitis and is highly effective in 80% of cases and has much fewer side effects than steroids. However it does take 3-6 weeks to be fully effective therefore it is often given in conjunction with steroids initially. It is very expensive so cost precludes treatment in some cases and in some dogs it can cause transient sickness.

3. **Anti-histamines** – these can be used in conjunction with other medications, are very safe and work in 20% of cases. They are particularly useful if given before the onset of itching if it is seasonal.

4. **Omega 3** – The main reason dogs with atopic dermatitis have an impaired skin barrier is that they lack omega 3 which coats the skin cells, improving skin health and preventing allergens entering. This should be given continually to any dog with atopic dermatitis to help improve skin quality, prevent flare ups and reduce itching. We recommend supplementing your pet's diet with **Nutromega** which is a natural and pharmaceutical grade product that is fed to your pet as a capsule every day. It also contains d-biotin and vitamin E to reduce skin inflammation.

5. *Topical products:*

- **Shampoos** – If your dog has severe atopic dermatitis then we advise using a medicated shampoo containing an anti-bacterial agent and an anti-fungal agent to help prevent skin infections secondary to scratching. This may be recommended monthly or even fortnightly. If your dog's condition is less severe then any soothing shampoo is beneficial and the benefit of this is to periodically wash the allergens off the body, at monthly intervals. Ask your vet for advice on which soothing shampoo to use as some can be too astringent and cause further irritation. If your dog is a big foot nibbler then it is advisable to wash in-between their toes after every walk involving grass.
- **Steroid sprays** – Sometimes we recommend steroid sprays to reduce the amount of steroids given orally and to relieve certain areas that are commonly affected.
- **Ear cleaner and ear drops** – see the ear infection advice sheet.