



Atopy

Atopy is a fairly common condition in dogs. Animals with atopy are allergic to substances in the environment that are inhaled or absorbed through the skin. The resulting allergic reaction is seen as extreme itchiness of the dog's skin.

The main allergens involved are pollens (grasses, weeds, and trees), moulds, and house dust mites. These allergens are not at all harmful to non-atopic dogs.

Atopy can arise in any breed, and in crossbreed dogs. Certain breeds are particularly susceptible to the condition, particularly West Highland White Terriers, Labradors, and Golden Retrievers.

What are the signs of atopy?

The condition is usually first seen in animals between 1 and 3 years of age, however it may develop as late as 7 years. Initially atopy may be seasonal (often occurring only during the spring/ summer when pollen counts are high), but most affected dogs eventually suffer from signs all year round.

The principal sign of atopy is intense itchiness. The areas most affected are the face, paws, groin and ears. Some dogs are affected in all of these areas; other animals tend to develop signs at just one of these sites. In addition to scratching and chewing the itchy parts, dogs often lick the affected areas or rub them along the carpet.

Initially the skin will not look abnormal or may just appear slightly reddened. However, over time skin lesions develop as a result of all of the scratching. For example, you may notice:

- Hair loss (this can be extensive if the condition is left untreated)
- Bacterial infection of the skin
- Unpleasant smell to the skin (often indicating yeast infections)
- Thickening and wrinkling of the skin
- Darkening of the skin (hyperpigmentation)
- Ear infections or itchy, sore feet

How is atopy diagnosed?

There are many skin diseases that cause itching and they can all look rather similar on examination of the affected dog. To reach a diagnosis your vet will consider the age and breed of your dog, the pattern of the skin lesions and your description of their development. Your vet may decide to take skin scrapings and/ or blood tests to look for the presence of mites, if mange is suspected. In rare cases, biopsies are taken under anaesthetic to rule out

unusual causes of skin disease. Blood tests can be used to determine which of the common allergens (pollens, moulds, dust mites, flea saliva) an atopic animal is allergic to.

As discussed above, many atopic animals present with skin infections as a result of chronic scratching. Skin samples can be taken to find out if infection is present, and to gain more information as to how best to treat it. These animals will need to be treated with appropriate medication (usually fairly long courses of antibiotics, and possibly medicated shampoos and washes) to clear the infection before your vet can diagnose atopy.

How is atopy treated?

Atopy can be an extremely frustrating problem for vets, owners and animals to deal with. It is important that everybody involved understands that although the problem can be satisfactorily controlled, it is rarely cured. *(Atopy can be considered to be the canine equivalent of hay fever – it is possible to control the symptoms by reducing pollen exposure and taking medications to reduce the allergic response, but a person with hay fever will always have hay fever so will always have to take measures to control their condition).*

1. **Clear up any skin infection and treat any concurrent ear or eye problems.**
2. **Ensure that flea control is up to date and constant.** Many atopic animals are allergic to flea saliva, in addition to being allergic to pollens, dust mites and so on. All animals in contact with your dog will need to be treated with a prescription product and environmental management is also essential. Your vet will discuss this with you.
3. **Consider performing a diet trial.** Approximately 15% of dogs with atopy are allergic to something that they are eating. The only way to find out if your dog is in this category is to feed a special exclusion diet for 8 weeks. If your dog is not itchy at the end of this period, then the diet (or an equivalent) should be continued for life and no further treatment should be required. If your dog remains itchy after 8 weeks of the special diet, then your dog is allergic to something other than food and there is no reason to continue the special diet. The diets that we use for the 8 week trial are HYDROLYSED diets that have been heat-treated to break up the proteins into such small pieces that the immune system cannot recognise them. The diet must be fed exclusively (no other treats or foods given). We usually use anti-itch medication for the first 4 weeks of feeding the new diet and then stop the medication, continue the diet and see if the problem is solved or not. You should choose one of the following three diets (available through the practice or online):
 1. Hills z/d (tinned or dry)
 2. Purina HA (dry)
 3. Royal Canin Anallergenic (dry)
4. **Use medication to 'switch off' the itch - Apoquel** For dogs with atopy that do not get better with a special diet (or when it is not practical to perform the diet trial), the mainstay of treatment is to switch off the abnormal itch reaction in the skin. This treatment is generally continued on a long-term basis, as the itching will recur when the medication is stopped. Apoquel is a tablet that is given once daily to switch off the itch reaction. It begins to work within hours of taking the first tablet. We see very few side effects with Apoquel, but because it is a chemical drug that acts on the immune system, dogs taking the tablets should be examined by a vet every 6 months and have blood and urine tests taken every 12 months. Apoquel cannot be used in dogs under 12 months of age. As a very rough idea of cost, including blood tests and examinations, it will cost £381 every 6 months to treat a 15kg dog with Apoquel.

5. **Use medication to 'switch off' the itch - Cytopoint** Cytopoint also acts on the skin to 'switch off' the itch, however Cytopoint is given as a monthly injection at the surgery rather than a daily tablet at home. Because Cytopoint is a biological therapy rather than a chemical (it is an antibody that blocks the itch receptors in the skin) it can be used in any age of dog and does not require annual blood tests. Cytopoint has no reported side effects on the data sheet. As a rough idea of cost for the monthly injections, it will cost £660 every 6 months to treat a 15kg dog with Cytopoint.
6. **Use medication to 'switch off' the itch - Atopica** Atopica is an immunosuppressive medication that can be used instead of Apoquel or Cytopoint. The medication is given every day for 8 weeks until the itch is controlled, and then the dose is gradually reduced to find the lowest dose that controls the itchiness (often every other day or twice a week). This medication has more widespread and powerful effects on the immune system than Apoquel or Cytopoint, so regular examinations and blood tests are important, and side effects such as diarrhoea or poor appetite can be seen. As a rough idea of cost, it will cost around £825 every 6 months to treat a 15kg dog with Atopica. Atopica may need to be stopped temporarily when your dog is vaccinated.
7. **Use medication to 'switch off the itch' - corticosteroids** Steroids will also suppress the immune system and stop the itch. Like Atopica, they have more widespread effects on the body's immune system than Apoquel or Cytopoint. Common side effects include increased hunger, increased thirst and urination, depression, skin thinning and an increased risk of diabetes and liver disease. There are several other medications that cannot be given at the same time as corticosteroids, such as the anti-inflammatory painkillers, because together the drugs can cause stomach ulceration. Examinations every 6 months and blood tests every 12 months are recommended for monitoring. As a rough idea of cost, it will cost around £206 every 6 months to treat a 15kg dog with corticosteroids.
8. **Shampoos will soothe the skin.** Medicated shampoos will often be prescribed to reduce itchiness and to control secondary skin infections (such as those caused by yeast infections). Using these shampoos will improve your dog's comfort and may reduce the dose of medication required to keep your dog itch-free. In some cases, once the initial symptoms are under control dogs with mild atopy can be maintained on flea treatment, special diets and weekly shampooing without the need for permanent medication at all.
9. **Antihistamines and essential fatty acids will also help.** Antihistamines and essential fatty acids (similar to Evening Primrose Oil) may be prescribed for your dog. These treatments do improve skin quality but are rarely potent enough to control the problems of atopy on their own – they are usually used alongside other treatments.
10. **Immunotherapy**

If your dog undergoes tests to find out what they are allergic to, this will provide further options for treatment of his/her atopy. Once you know which allergens your pet is sensitive to, you may be able to avoid them altogether or reduce exposure to them (e.g. keep your pet away from carpeted areas if house dust mites are the problem). Unfortunately, most allergens are difficult to avoid (e.g. grass pollens in the air outside). Therefore, the main purpose of running these tests is so that an anti-allergy vaccine can be custom-made for your pet. This can be used to desensitise your dog to the things he/she is allergic to so that eventually he or she will no longer become itchy when exposed to these substances in the environment. Disadvantages of desensitisation therapy include: cost (which can be significant), and time (to visit the surgery for regular desensitisation injections as often as once a week in the initial

stages of therapy). It usually takes one year of vaccinations to find out if this treatment is going to be successful. In dogs, rough figures indicate that in one third of atopic dogs this treatment will be sufficient to reduce itchiness to almost zero; in another third of dogs the treatment will reduce itchiness somewhat but medical treatment will also be required to control the problem; and in one third of dogs the treatment will make no difference at all. It is usually necessary to use an anti-itch medication such as Apoquel or Cytopoint (Atopica or corticosteroids would stop the vaccine from working) to keep dogs comfortable during the first 6 months of desensitisation therapy.

Summary

Atopy is a fairly common condition in dogs. It can compromise your pet's comfort and welfare if it is left untreated. Treatment is usually based on controlling the problem rather than obtaining a permanent cure and is best achieved by using a combination of medications and management measures to keep your dog's itchiness at a reasonable level.

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