Reducing allergens at home

Fleas and dust mites
Only 5% of fleas live on the pet, the remaining 95% living in the environment. Therefore good household flea control is vital for atopic animals. Any bedding and toys should be washed regularly, if items cannot be washed, freezing them for 24hrs will also kill flea larvae and house dust mites. A high efficiency particle (HEPA) filter vacuum cleaner to remove fleas and dust mites should be used. Levels of dust mites are highest in bedrooms so consideration may also want to be given as to how much time pets spend in these rooms. A household insecticide that kills fleas and dust mites should be used regularly.

Storage mites
These live in dried food that has been stored for a long time. Therefore if your dog is on dry food and allergic to storage mites, it would be preferable to purchase bags of food that will not last longer than 1 month. The smaller bag sizes may be more appropriate. Once opened, the bag should be resealed to ensure that it is airtight and ideally the food should not be tipped into another container. If a storage container must be used then it should be cleaned thoroughly between each new bag.

Referrals
This practice offers in-house referrals of patients to veterinary surgeon Rachel Sant who has post-graduate qualifications in both dermatology and internal medicine and is particularly interested in allergic skin disease in dogs and cats. She is happy to see all variety of skin cases in all small animals and can carry out allergy testing and skin scrapes as required.

And finally............
It is important for owners with pets who are affected by allergic skin disease to understand that this is an ongoing and long-term problem which will need to be managed throughout the pet’s life.
**Skin allergies in dogs**

One in ten dogs is affected by allergic skin disease which is clinically called atopic dermatitis or atopy. Signs include generalised itching, or more specific licking and chewing in regions with skin folds such as feet and groin. Frequent ear infections can also be a sign of atopy. The itching can become so severe some dogs develop secondary infections and, when scratching, traumatise their skin leading to bleeding, scabs, crusts, hair loss and changes to the pigmentation of skin in affected regions. This condition generally begins when the dog is between 6 months and 3 years old but can begin at any age. All breeds can be affected but some breeds of dog are reported to be more prone to atopy such as West Highland White Terriers, Staffordshire Bull Terriers, Boxers, Labrador Retrievers, Golden Retrievers and German Shepherds.

**Causes**

Atopy is defined as a genetic disposition to develop a hypersensitivity to environmental allergens. Allergens are substances which cause allergies and can include parasites such as fleas, house dust mites, pollens, moulds and foods. Every dog is sensitive to different allergens and can just be sensitive to one or multiple allergens. Each dog has an allergic threshold for each allergen. When the level of exposure to this allergen is below the threshold the dog will not be itchy but if the amount of allergen rises, a flare of symptoms occurs. Atopy can be seasonal for some dogs if their allergens are for example pollens or, in the case of food allergens or multiple allergens, can affect the dog all year round.

**Diagnosis**

Unfortunately there is no one specific diagnostic test for atopy. There are a number of conditions which can cause similar signs so initially it is very important to rule out causes such as bacterial, fungal and parasitic infections. Some hormonal conditions can also cause skin disease. Therefore when a dog first visits the vets with itchy skin, bacterial infection and parasite infestation may have to be treated first. If symptoms continue, then the vet is likely to discuss skin tests and blood tests to rule out underlying disease.

Once underlying disease has been ruled out and your dog continues to shows signs typical for atopy, an elimination food trial and allergy testing are likely to be discussed. A full work up for any skin disease may take weeks or even months in some cases.

**Elimination food trial**

In approximately one out of every four atopic dogs, food is one of the allergens responsible for their symptoms. A food allergen is one of the few allergens which it is possible to fully remove making identifying it very important. An elimination food trial involves feeding your dog a diet containing a protein and carbohydrate your dog has never been fed before for 6-8wks, with no other food being given during that time. During the trial you monitor if the itching and other signs reduce. At the end of the trial you reintroduce previously used foods to see if signs return. If there is a good improvement on the novel diet and return of symptoms on the old diet then a food allergy is proven and feeding a new long term diet excluding the allergen will permanently reduce signs.

**Allergy testing**

Allergy testing is performed either by blood sampling or by using intradermal skin testing. At Elands we mostly use blood sampling. The results of this testing indicates if a dog has allergies to fleas, house dust mites or other mites, specific pollens or mould spores. This method of testing cannot check for food allergies.

**Treatments**

There is no cure for atopy but there are a variety of treatment options available. Treatment aims are initially to control symptoms but then move on to long-term management of the disease and preventing recurrence. No matter how well an atopic dog is managed they will have occasional flare ups so treatment is also needed to manage these.

Some treatments used include:

- Antibiotics and Antifungals – used to control secondary infections
- Antihistamines – used to reduce itching
- Essential fatty acids – these improve the skin’s barrier to allergens
- Shampoos – used to remove allergens from the coat and improve the skin’s barrier to allergens
- Flea control – this is especially important in dogs with flea allergies but all allergic dogs benefit from reducing itching from bites
- Dietary management – strict control is needed when a food allergy has been identified
- Steroids – used to reduce inflammation and itching, preferably used for short term courses but in some cases needed long term. These can be given as tablets or more safely as topical treatments e.g. ear drops, gels or sprays
- Atopica – this medication can reduce allergic response and can be used long term
- Immunotherapy- this treatment is made individually for each dog with an aim to reduce their allergy response to each allergen.