

Scratch below the surface...



...living with **skin** conditions

A guide to the most common
skin conditions in pets



In their skin

Skin conditions can be very distressing for both pets and owners, but with the right expert veterinary care and a tailored management plan, your pet's condition can be brought under control.



Ear Disease

- Scratching
- Tilting head
- Bad odour
- Discharge
- Redness or swelling

Atopic Dermatitis

- Itching
- Excessive licking
- Chewing
- Red skin
- Hair loss

Flea Allergic Dermatitis

- Severe itching
- Hair loss
- Scabs

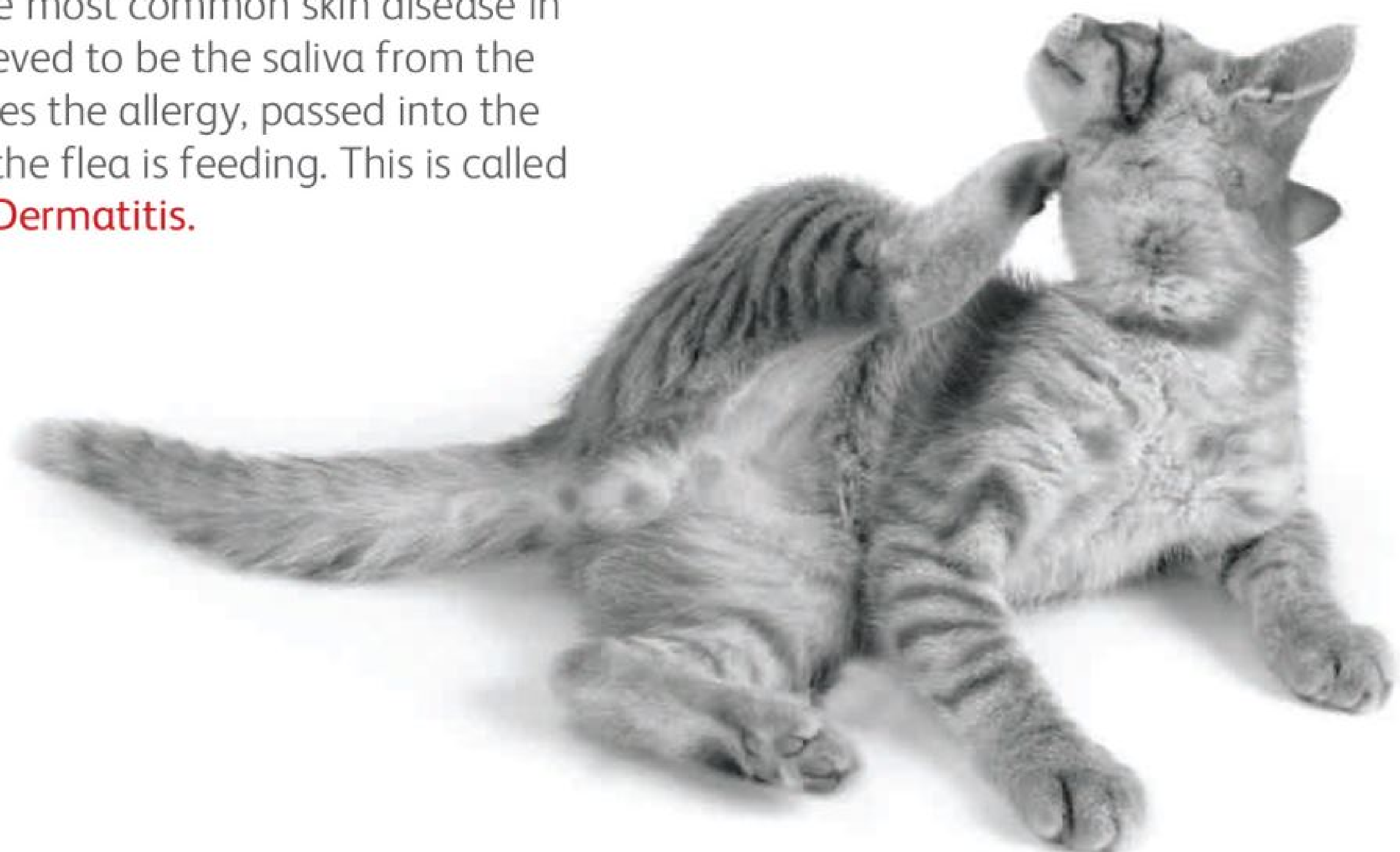
Skin Conditions



Skin conditions, such as ear infections and allergies, are some of the most common health problems in pets. They can often be difficult to diagnose because a number of different diseases can cause the same symptoms, however, a correct diagnosis is essential. With the right care, your pet's skin condition will be treatable.

So what are the most common skin conditions in pets?

- One such hereditary disease is characterised by itching and skin inflammation. This is caused by an abnormal reaction to allergens, the tiny particles in the environment, such as house dust mites, mould spores, pollens, grasses and fleas. This skin condition is called **Atopic Dermatitis, or Atopy.**
(Page 04)
- **Ear disease** is another common skin condition and can involve inflammation of the outer, middle or inner ear. Of these, outer ear inflammation is the most common and can be caused by foreign bodies, parasites or an accumulation of hair or dead skin.
(Page 16)
- Sensitivity to flea bites, causing an allergic reaction, is the most common skin disease in pets. It is believed to be the saliva from the flea that causes the allergy, passed into the animal while the flea is feeding. This is called **Flea Allergic Dermatitis.**
(Page 12)



Atopic dermatitis (Atopy) in dogs and cats



Atopy is a hereditary skin disease of dogs and cats, characterised by skin inflammation and itchiness. Current understanding is that it is caused by an abnormal reaction of the immune system to tiny particles in the environment called allergens, combined with abnormalities in the surface layer of the skin.

Allergens enter the body through the skin and lead to the production of certain antibodies in genetically predisposed animals. These antibodies then cause either intermittent or chronic (long-term) symptoms.

Atopic dogs and cats may be allergic to a variety of things in the environment, most commonly house dust mites, mould spores, pollens, grasses and fleas. They can have more than one allergy, which contributes significantly to the time it takes the vet to diagnose the problem.

Each dog and cat has an allergic threshold and once this threshold is exceeded, itching and skin lesions develop. Fleas are very common in the UK, particularly in cats, and some animals are allergic to the saliva protein from flea bites. This can develop to a more sensitive skin disease called flea allergic dermatitis - flea bite hypersensitivity.



Signs and symptoms

Itchiness is the main symptom of Atopy, demonstrated by scratching, excessive licking, chewing or rubbing of the affected parts of the body.

The most commonly affected areas are;

- the face
- the ears
- paws (see Figure 1)
- wrists
- ankle joints
- the underside of the belly.

Symptoms usually occur on more than one of these areas and are generally on both sides of the body.

Recurring or chronic ear infections are also common.

Some dogs may also develop redness of the eyes, called conjunctivitis.

Initially the condition presents with red skin and itchiness.

Over time, due to ongoing self-trauma, areas of hair loss can develop (see Figure 2). The skin can become darker in colour and thickened with an irregular surface.

Secondary bacterial skin infection commonly develops, which causes little red spots on the skin called papules. These fill with pus to form pustules, which then burst forming crusts and circular flaky areas.

Secondary overgrowth of yeasts and/or bacteria can cause the skin and coat to become greasy, which can cause a strong and unpleasant smell.

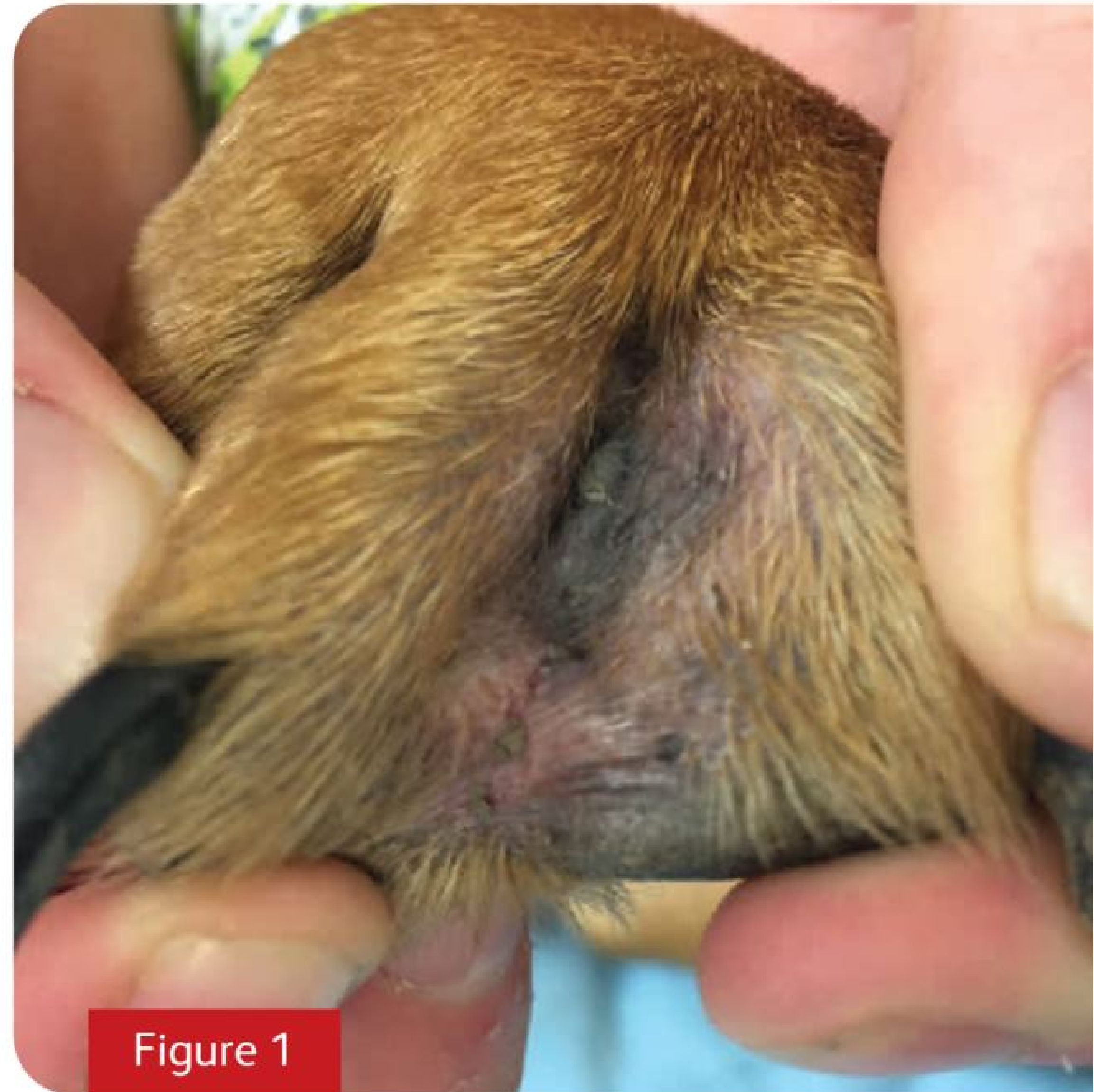


Figure 1

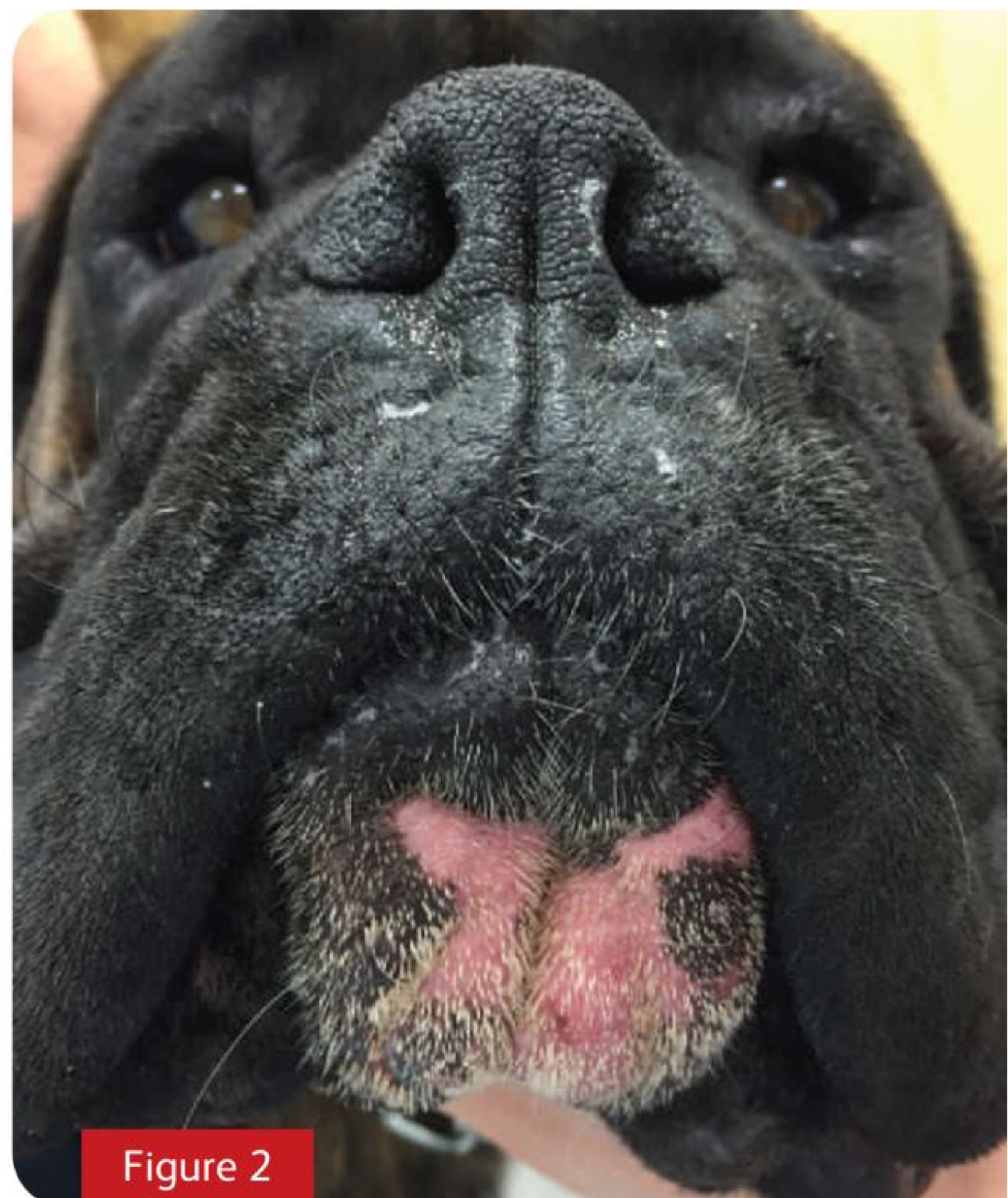


Figure 2



Figure 3



Figure 4

Diagnosis

Unfortunately, Atopy cannot be diagnosed by any one single test and may take weeks to confirm. A diagnosis is usually reached by a combination of the animal's history and presenting symptoms, (as explained on the previous page), with the exclusion of any other skin diseases which have similar signs.

This can take a number of visits to your vet, various tests and a series of trial treatments. This often requires considerable patience.

History

The vet will need to ask a number of things;

- As Atopy is a hereditary skin disease in dogs, do you know anything about your pet's parentage, or siblings?
- When did the first signs of skin or ear disease start? Typically the first symptoms of Atopy arise before the age of 3-4 years.
- Is the breed commonly affected by Atopy?
- Does the problem appear to be seasonal?

Exclusions

The vet will need to rule out other skin problems to confirm atopic dermatitis.

- Coat brushings and skin scrape samples to look for fleas and mites.
- Surface sampling from skin or ears to identify yeast and bacterial infections (see Figure 3 and 4).
- A comprehensive flea control programme will be prescribed.
- A strict hypoallergenic diet trial may be recommended for 6-10 weeks.

If the itching persists once parasites, infections and food allergy have been ruled out, then atopic dermatitis is likely.

Treatment

This is a life-long disease that needs to be managed long term. The initial cost of investigation may appear expensive, but this should reduce as management of your pet becomes easier. The short term treatment is about taking control of the problem and the long term treatment is about managing it.

You may see little improvement in your pet in the first month of treatment, which may make you want to stop before it has had a chance to work. Equally the itching may stop quickly and you think your pet is cured. Do not give up!

Allergen avoidance

Although this is not always easy, taking measures to reduce exposure to the allergens, whether these are found indoors or outdoors may help reduce the levels of itching.

- Wash your dog's bedding regularly.
- Ban them from your bedroom (a favourite place for dust mites).
- Vacuum frequently, not with the pet in the room.
- Use air dehydration and purification systems.
- Use insecticides effective against house dust mites.



Hyposensitisation

Having a vaccine made up, which contains the allergens your pet is allergic to and injecting this under the skin can be effective in 50 to 80% of cases. This is called Allergen Specific Immunotherapy (ASIT) and is considered a very safe treatment. It may take 3-12 months to see a positive response and needs to be given life-long.

Treatment of 'Flare factors'

Effectively managing overgrowth of bacteria and/or yeasts on the skin with antibiotics and/or antibacterial/antifungal shampoos is very important in managing Atopy. In some cases this may be the only form of treatment required. In addition, ensure adequate flea control at all times, even if you never see any signs of these, as flea bites could cause a flare to occur.

Corticosteroids

These usually come in tablet form or can be given by injection. They can be very useful in acute, short-term cases as they can work within hours, but must be used with care in more long-term cases in order to reduce the risk of side effects. Steroids can also be applied directly to affected skin in the form of gels or sprays. This form of treatment can play a very important part in managing skin conditions.

Treatment

Cyclosporine

This drug, like corticosteroids is very effective but costs significantly more. Although slightly slower to work, its advantage over corticosteroids is reduced long-term side effects. Adding in other treatments, listed below, can reduce the dosage and frequency of administration of both corticosteroids and cyclosporine.

Oclacitinib

An effective non-steroid anti-itch tablet, given daily and highly effective at reducing itch in the majority of dogs.

Prescription diets

These are specially formulated to improve skin health and reduce itching.

Essential fatty acids

These originate from fish and various plants such as Evening Primrose and Borage. It may take 8-10 weeks to see the effect of these.

Antihistamines

These may, in limited cases, have some beneficial effect.

Topical treatments

These are applied directly to the skin in the form of shampoos (see Figure 5), mousses, lotions, wipes and moisturisers. They help soothe and repair damaged skin.

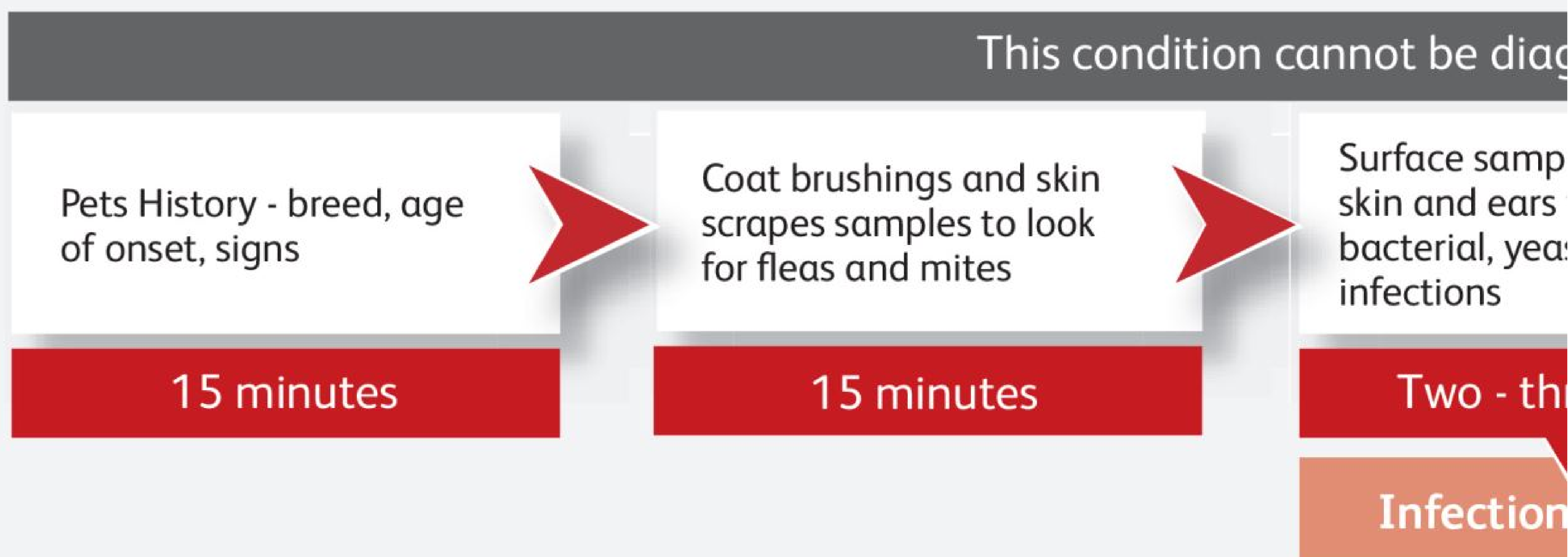




Figure 5

Diagnosis Flow Chart

Atopic Dermatitis - caused by an abnormal reaction of the immune system



Ear Disease - can be caused by allergy, foreign bodies, parasites, accumulation of wax, a trauma or a secondary symptom of another underlying condition



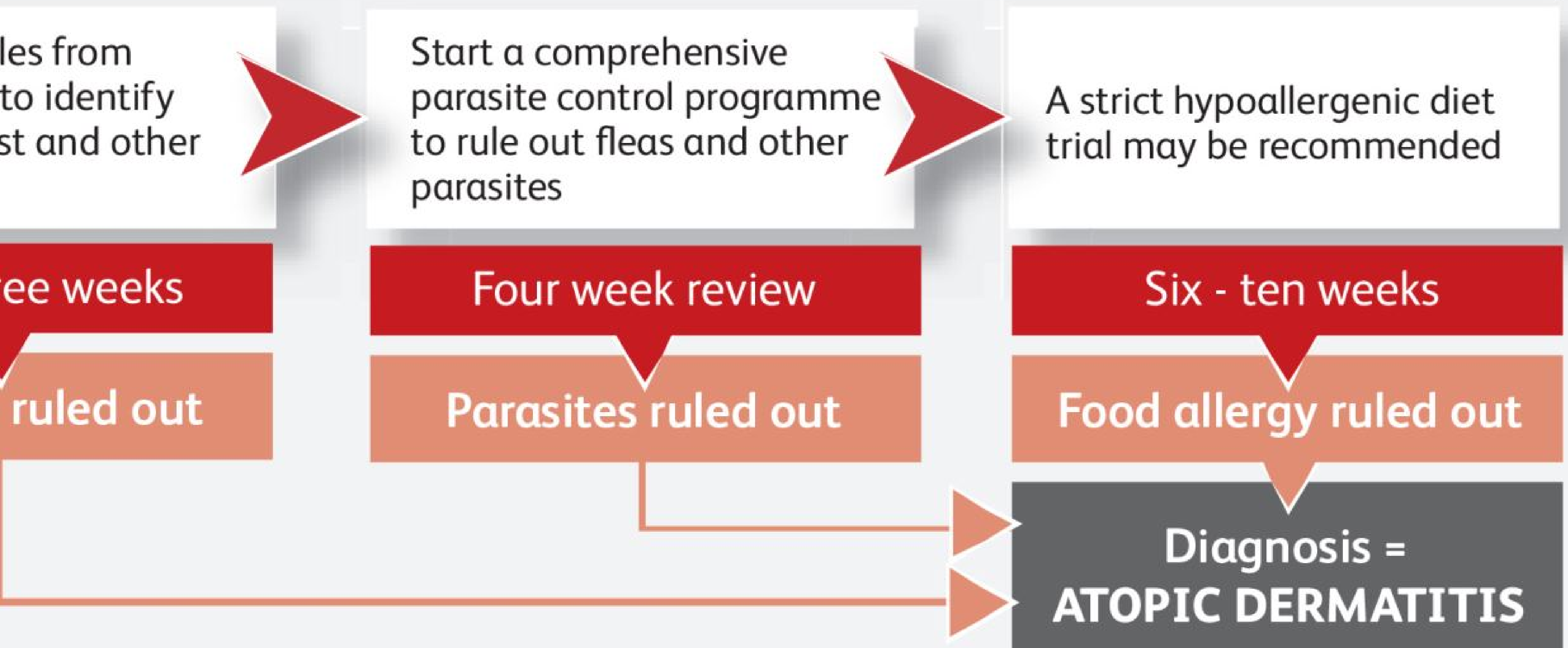
Flea Allergic Dermatitis - Flea bite hypersensitivity caused by the allergic reaction to flea saliva



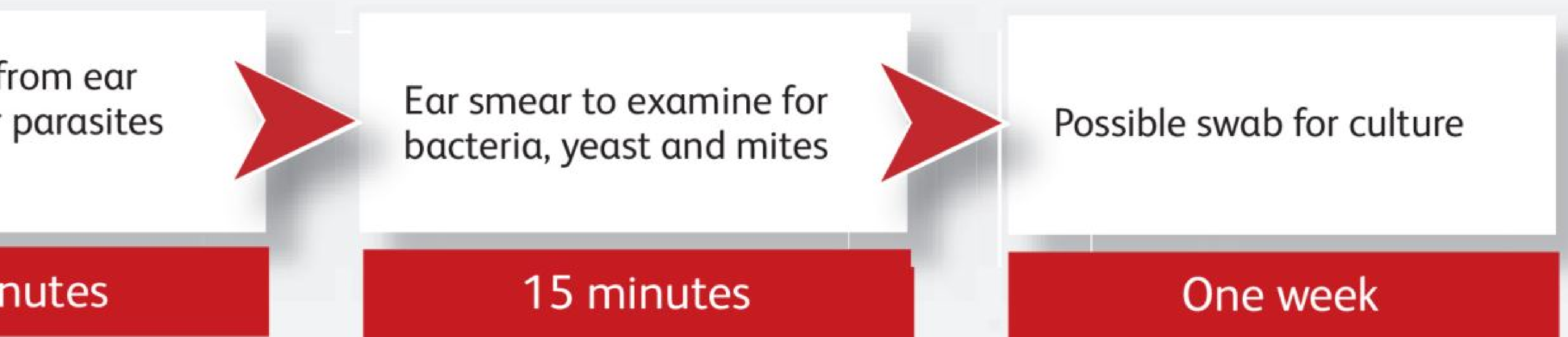
Scratch below the surface...

...the system to allergens in the environment

...cannot be diagnosed by any one single test



...examination of hair or dead skin, results of the disease



...the saliva in the flea bite



Flea Allergic Dermatitis



Flea bite hypersensitivity, or flea allergic dermatitis, is the most common skin disease in pets, and although the allergies usually develop when they are young, up to five years of age, flea allergies can begin at any age.

It is believed that it is the saliva from the flea that is the cause of the allergy or sensitivity. The flea saliva, passed into the animal while the flea is feeding, contains multiple substances that can be irritating or allergenic.

Signs and symptoms

Flea bite hypersensitivity, or flea allergic dermatitis, usually causes severe itching of the skin.

It may only take a few flea bites to cause itching, so symptoms will often persist even after some form of flea control has been used. Some pets can also suffer behavioural problems as a result of flea bite hypersensitivity, with a condition called neurodermatoses.

Most owners first notice frequent and severe itching and scratching, with hair loss (see Figure 8) and scabs developing on their pet's skin. Generally the hind quarters are affected more than the front of the body or the head, however, pets that are being affected by an allergic reaction to the fleas can have lesions anywhere on the body. Moreover, fleas or flea dirt may or may not be visible.

Diagnosis

Flea infestations are more common and severe in warm humid weather - ideal conditions for rapid flea development.

Having used flea control occasionally does not rule out flea allergy dermatitis. Your vet will need to know exactly which flea control products you use, the frequency of use and dose of application, the presence of other animals in the household and the frequency of bathing.

By using a flea comb to inspect your pet's hair, fleas or flea dirt can be seen more readily (see Figure 6). Skin tests for mites or bacterial skin diseases may be recommended if fleas cannot be found. Sometimes the best diagnostic method is to just treat for fleas but remember, there is a wide variation in effectiveness between many of the flea control products available.





Figure 6

Treatment

Flea control and prevention is essential for pets with flea bite hypersensitivity.

There are numerous options on the market that kill the adult fleas for a period of time, but all should be repeated (as indicated) for continuous flea control. Insecticides often are applied as spot-on treatments (see Figure 7) - typically topical treatments that are applied to a small area, usually at the top of the back (between shoulder blades) or back of the neck where the pet is unable to lick it off. Oral products (tablets and chewable treats) are also available, some of which may be more useful and practical for you.

Flea shampoos may be beneficial for young animals or for an acute flea infestation, but these have only a very short action. Continuous management with a safe and effective long-term product (or combination) is essential. Consider the use of a diary, calendar or mobile phone to help remember when the next treatment is due!

Pets that are allergic to fleas may require steroids or antihistamines to combat their sensitivity to the bites. Likewise, if a secondary bacterial infection develops with sores on the skin, antibiotics may be prescribed. Follow-up examinations are recommended to determine how treatments are progressing.

The most important factor in successfully managing a pet with flea allergy is the regular use of effective flea treatments, remembering to treat all in-contact cats and dogs as well as the house. Most of the flea

life cycle takes place OFF the pet, in the home environment. Because it takes only one or two bites for a flea allergic animal to start itching, it is best that you be consistent with flea control products. Other factors to consider, such as frequent bathing, and whether you are using spot-on treatments or other topical products, will determine how long to wait between product applications.

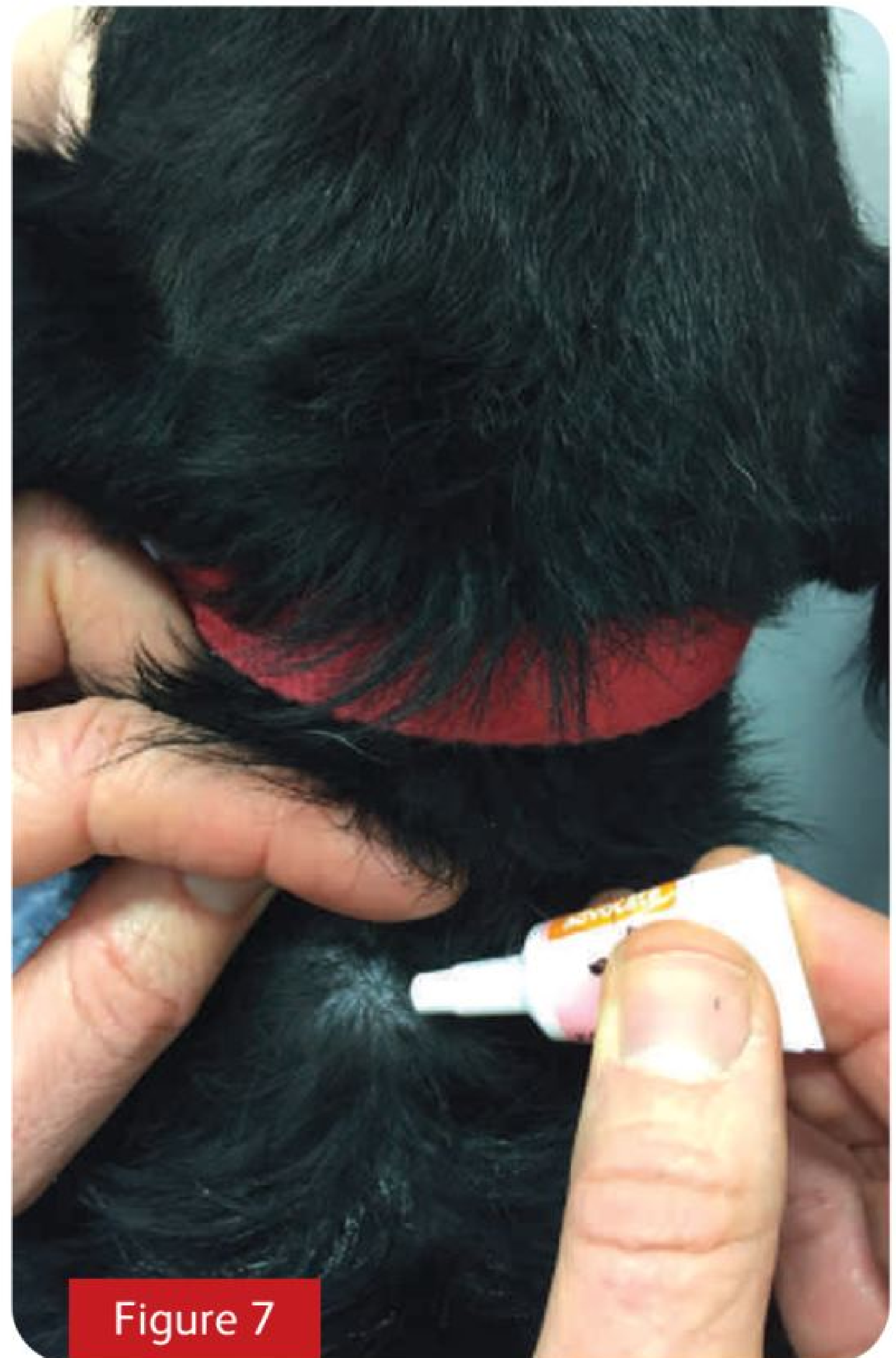


Figure 7



Figure 8
Cat with fur missing on the back, a common sign of flea bite hypersensitivity.



Figure 9
The fur loss has grown back following flea control treatment.

Ear Disease



Ear disease is one of the most common conditions vets see in pets with at least 1 in 10 dogs affected in veterinary practices.

Ear disease may involve inflammation of the outer ear canal, the middle ear, or the inner ear. The most common is inflammation of the outer ear canal (see Figures 10,11 and 12), which may be caused by primary factors such as foreign bodies, parasites or an accumulation

of hair or dead skin. It could be the result of a trauma, cats fighting for instance, or it could be a secondary symptom of another underlying disease, such as allergy. At least 70% of recurrent outer ear canal cases are associated with allergy.



Figure 10

Signs and symptoms

The most common symptoms include some or all of the following:-

- Pain around the ears
- Shaking of the head or tilting it to one side
- Scratching or rubbing of the ears and head
- A bad odour
- Discharge in the ears
- Redness or swelling of the ear flap or canal
- And sometimes changes in behaviour such as depression or irritability.

Diagnosis

Because there are many potential causes of ear problems, vets cannot simply say it is a bacterial ear infection, dispense antibiotics and it will go away.

Your vet may use an otoscope to look down into the ear canal to determine a number of things, such as the amount of inflammation present, if the ear drum is involved, and if there are any foreign bodies, tumours, or other potential causes of the problem.

The vet may take a skin scraping from your pet's ear flaps to test for parasites, or take a swab of the ear to examine under a microscope for bacteria, yeast and mites. Outer ear inflammation is a common feature of atopic dermatitis in dogs and can sometimes be the only clinical sign. A thorough history and physical examination may help suggest if this could be an allergic or other type of problem, and possibly lead to further diagnostic testing.



Figure 11



Figure 12

Treatment

This will depend on the cause of the ear problem and whether secondary conditions are present, such as infection, swelling or pain.

Treatment usually involves outpatient care, unless the inflammation or infection has moved into the inner ear. In most cases a topical therapy following a complete cleansing of the external ear is an effective resolution to the problem.

The topical therapy may consist of a combined antibacterial, anti-inflammatory (corticosteroid) and anti-yeast product such as drops or gel. In severe cases - where the presence of infectious organisms has been confirmed - oral antibiotics and antifungals may be prescribed. Oral or injectable anti-inflammatories and painkillers may also be used as ear disease may be very painful for pets.

Follow-up treatments involve repeat examinations of the ear canal, assessing discharge and control of any underlying

diseases. You may be asked to routinely cleanse the dog's ear to prevent a recurrence (see Figure 13).

If these conditions persist over long periods of time, and are not treated, they may lead to more severe infections, deafness and the possible need for surgical removal of the ear canal. Early accurate diagnosis and correct management is essential to avoid chronic painful disease.



Figure 13

Dermatological Personal Treatment Plan



Date of first appointment:

Treatment plan

Owners observations

WEEK 1

WEEK 2

WEEK 3