

# PRURITUS: ITCHING AND SCRATCHING

## About the Diagnosis

In animals, itching is a sensation resulting from the stimulation of nerve endings in the skin that provokes the desire to scratch, rub, lick, or chew the area. Many disease conditions of the skin cause itching in pets, and often itching pets have more than one underlying condition present. For example, allergies are a common cause of itching-pets can be allergic to substances in the environment, such as inhaled pollen and dust (inhalant-induced allergies of the skin are called atopy), to food, or to parasites. In dogs and cats, allergy to any of these factors causes itching. Bites of parasites such as fleas, mites, lice, ticks, and flies can be responsible for itching. Skin infections due to bacteria, ringworm fungus, or yeast commonly cause itching. Less commonly, certain immune-mediated diseases and some skin tumors may stimulate itching. In addition, boredom and anxiety can be factors in psychogenic disorders that involve excessive licking and chewing when no underlying skin disease is present.

Sometimes pets do most of their licking and scratching when their owners are not present; in that case, the presence of itching must be deduced from the resulting hair loss and skin irritation. Cats sometimes groom themselves so excessively when the owner is not present that they remove all the hair from their bellies. Often the owner believes the hair has fallen out, but microscopic examination of the hair shafts reveals that the hairs have been broken off by excessive grooming.

**Diagnosis:** Pinpointing the specific cause of a chronic itching problem can be challenging, especially since some animals have more than one underlying condition. For example, pets that have allergies tend to become allergic to multiple substances. The skin damage caused by scratching and chewing also predisposes the pet to secondary conditions such as bacterial and yeast infections, which themselves may cause even more itching. An itching pet may have allergies to fleas and to food and also have a bacterial infection of the skin at the same time. Treating only one of these problems may not help very much to control the itching. This demonstrates the importance of assessing the skin properly, usually with diagnostic tests (see below) to have a clear answer about the cause and therefore to choose the best treatment. If several problems are causing the itching, their effect is additive. Thus, if a pet has atopy, it is not possible to prevent exposure to the pollens and dust that cause the allergic reaction, but treatment of other allergies, rigorous parasite control, and elimination of skin infections may provide sufficient relief.

A thorough history is an essential part of the diagnosis of skin diseases. This is because basic information and details based on what you have observed can be very helpful in determining the probable cause(s) of itching. Your veterinarian will need information such as: How long has the itching been present? How old was your pet when the itching began? Is the itching seasonal (or was it initially), or rather does it occur year-round? What area of the body was first affected? Has it spread to other areas? How severe is the itching?

Because so many different skin problems can cause itching, diagnostic tests are used for determining the cause of itching. In this way, the problem can be more clearly identified so that the best treatment can then be started. Commonly used diagnostic tests include:

- Skin scrapings: a tiny sample of skin cells is collected by painlessly and superficially scraping the skin; the sample is placed on a slide and examined under a microscope; used for detecting microscopic infectious agents such as mange mites, yeast, and bacteria.
- Acetate tape preparations: tape is placed against the skin, and the material sticking to the tape is examined under a microscope; used for detecting some parasites and yeast infections of the skin.
- Fungal cultures: small clusters of hair are plucked from the edges of areas of hair loss and placed on a culture medium designed to grow and detect ringworm fungal organisms.
- Allergy testing: Two types of tests are used. In skin testing, small amounts of substances that commonly cause allergies are injected into the skin (intradermally), and reactions to the injections are monitored to detect hypersensitivity (allergic) reactions to the specific offending substances in a particular pet. A newer type of testing involves sending a blood sample to a laboratory that looks for the presence immunoglobulins (antibodies) that are involved in allergic reactions, but this form of testing is not considered quite as reliable as skin testing.
- Skin biopsy: a small sample of skin is taken using local anesthesia; the sample is sent to a pathologist for microscopic examination. This test is used if other tests have not yielded a diagnosis, if the condition is not responding to treatment, or if immune-mediated skin disease is suspected.

## Living with the Diagnosis

Some causes of itching are curable, such as ringworm infections and sarcoptic mange. Therefore, a major goal consists of identifying these infections when they are present so that the pet may be permanently relieved of the problem. However, the majority of pets brought to the veterinarian because of itching have chronic diseases that will require long-term management. Conditions such as allergies (very common) and immune-mediated skin diseases (uncommon) require some form of lifelong treatment (see below). Many of these pets intermittently can develop secondary conditions such as bacterial or yeast infections that are treatable but may tend to reoccur. Control of these secondary conditions will provide much relief for an affected pet. Also, new problems may arise that worsen itching. For this reason, diagnostic tests should be repeated whenever a pet has a flare-up of itching.

Overall, the causes of itching cover a wide spectrum of severity, and determining the cause of itching will also give an insight into expected outcome-cure versus lifelong treatment, for example.

## TREATMENT

Treatment is extremely variable, since itching is only the symptom of the problem ("the tip of the iceberg"). Therefore, the medications and other treatment strategies chosen depend entirely upon the underlying cause of the itching and should be discussed with your veterinarian.

### DOs

- If you have a chronically itchy pet, have an "emergency plan"-potentially involving certain medications that are useful short-term and act quickly, for example, to deal with flare-ups. Trial and error will often determine which treatment will work best for a specific pet.
- Topical ointments containing corticosteroids or anesthetics are often useful for localized areas of itching caused by certain processes, but detrimental for others-check with your veterinarian.
- For overall itching, colloidal oatmeal shampoos or rinses often help reduce the itching for a day or two. Topical treatments and baths seem to make some pets even itchier, however. For these pets, a rinse with cool water sometimes helps reduce the itching temporarily.

### DON'Ts

- Do not give oral corticosteroids (cortisone-type drugs), such as prednisone, to control itching without a diagnosis of the cause. Corticosteroids can make some conditions, such as bacterial or ringworm infections, mite infestations, and others, worse instead of better and potentially cause permanent damage to the skin or even to internal organs.

## When to Call Your Veterinarian

- Any time persistent scratching, licking, or chewing occurs or if a chronically itchy pet becomes worse.

## Signs to Watch For

- In addition to scratching, licking, and chewing, look for hair loss and red, inflamed skin. If this occurs despite treatment, the treatment may not be working, and a recheck or a second opinion is warranted.

## Routine Follow-Up

- Depends upon the cause of the itching.
- Discuss with your veterinarian at each visit.