

# ITCHINESS (PRURITUS)

## BASICS

### OVERVIEW

- “Pruritus” is the medical term for itching or itchiness; it is the itching sensation that provokes the desire to scratch, rub, chew or lick
- Pruritus is an indicator of inflamed skin
- The term is not a diagnosis, but rather is a description of a clinical sign

### SIGNALMENT/DESCRIPTION of ANIMAL

#### Species

- Dogs and cats

### SIGNS/OBSERVED CHANGES in the ANIMAL

- Scratching
- Licking
- Biting
- Chewing
- Self-trauma
- Inflammation of the skin (known as “dermatitis”)
- Hair loss (known as “alopecia”)
- Other signs determined by underlying cause

### CAUSES

- Parasites—fleas; mites (canine scabies [*Sarcoptes*], *Demodex*, ear mites [*Otodectes*], feline scabies [*Notoedres*], “walking dandruff” [*Cheyletiella*], harvest mite or red bud [*Trombicula*]); lice; rhabditic dermatitis (*Pelodera strongyloides*); or migration of internal parasites
- Allergies—parasite allergy; atopy (disease in which the animal is sensitized [or “allergic”] to substances found in the environment [such as pollen] that normally would not cause any health problems); food allergy; contact allergy; drug allergy; allergy to skin bacteria (known as “bacterial hypersensitivity”)
- Bacterial or fungal infections—typically *Staphylococcus* (a bacteria) and *Malassezia pachydermatis* (a yeast or fungus); rarely a dermatophyte (fungus living on the skin, hair, or nails); however, *Trichophyton* is a dermatophyte that tends to cause more itchy skin disease than the other dermatophytes
- Miscellaneous—excessive scaling of the skin (known as “seborrhea”); calcium deposits in the skin (known as “calcinosis cutis”); skin tumors or cancer
- Immune-mediated skin diseases and hormonal skin diseases can be variably itchy
- Psychological skin diseases may be associated with itchiness

### RISK FACTORS

- Exposure to other animals with parasites

## TREATMENT

### HEALTH CARE

- More than one disease can contribute to itching
- If identification and treatment for one cause of itchiness does not result in adequate improvement, consider other coexistent causes
- The use of mechanical restraint (such as an Elizabethan collar) can be a helpful option, but is seldom feasible in long-term treatment

### DIET

- Depends on underlying cause
- Usually no change in diet needed, unless suspect food allergy

### SURGERY

- Skin biopsy may be necessary for diagnosis or to determine underlying cause

## MEDICATIONS

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive.

### **Medications Applied to the Skin Directly (Known as “Topical Therapy”)**

- Topical therapy is helpful in mildly itchy pets
- For localized areas of itchiness or skin inflammation, sprays, lotions and creams are most appropriate
- If the itching involves many areas or widespread areas, shampoos are the preferred means of application
- Antibacterial shampoos help control bacterial infections that cause itching; however, some antibacterial shampoos (such as those containing benzoyl peroxide or iodine) can cause increased itching
- Colloidal oatmeal can be found in virtually all forms of topical therapy; in some cases, it is very beneficial, but its duration of effect usually is less than two days
- Topical antihistamines may be found alone or in combination with other ingredients; they may not have a beneficial effect
- Topical anesthetics may offer only a very short duration of effect
- Lime sulfur (which has a bad odor and can stain) can decrease itching, while also having anti-parasitic, antibacterial, and antifungal properties
- Topical steroids probably are the most useful topical medications; hydrocortisone is the mildest and most common topical steroid; stronger steroids (such as betamethasone) may be more effective and are more expensive
- Some topical steroid medications also contain ingredients (such as alcohol), which can aggravate already irritated skin
- In some animals, the application of any substance, including water (especially warm water), can result in an increased level of itchiness; however, cool water often is soothing

### **Medications Administered by Mouth or by Injection (Systemic Therapy)**

- Steroids to decrease inflammation and itchiness of the skin
- Cyclosporine to decrease the immune response
- For patients affected with airborne allergies for more than a few months out of the year, “allergy shots” (known as “allergen specific immunotherapy”) are appropriate, frequently beneficial, and may lead to a cure (in some cases)
- Antihistamines (such as hydroxyzine, diphenhydramine, and chlorpheniramine) to prevent inflammation and itching
- Fatty acids are available in powder, liquid, and capsules; they help block pathways that lead to inflammation, but may require 6 to 8 weeks of use until maximum effect is observed; fatty acids work better as preventive medications, rather than stopping the inflammation once it has become a problem; they also help control dry or flaky skin, which can cause itching
- Medications to relieve anxiety or depression (known as “psychogenic drugs”) can be helpful in controlling itchiness; include such drugs as amitriptyline, fluoxetine, and diazepam
- The use of drugs other than steroids to control itching is less convenient, but reduces potential for serious side effects—if these other drugs are not totally effective in controlling clinical signs, they often help reduce the amount of steroids that is necessary to decrease itchiness
- In extremely rare cases, medications to decrease the immune response (known as “immunosuppressive drugs,” such as azathioprine) may be utilized; however, they generally are reserved for instances where euthanasia is being considered or because all other treatment has failed

## FOLLOW-UP CARE

### **PATIENT MONITORING**

- Patient monitoring is imperative; pets should be examined periodically to evaluate response to treatment
- Patients receiving long-term (chronic) steroids should be evaluated every 3 to 6 months for signs of medication-induced excessive levels of steroids in the body (known as “iatrogenic Cushing’s disease”)

### **PREVENTIONS AND AVOIDANCE**

- Prevent infestation with parasites (such as fleas and mites)
- Avoid foods identified as causing food allergy for your pet

### **POSSIBLE COMPLICATIONS**

- Owner frustration is common
- Complications (such as increased thirst [known as “polydipsia”] and increased urination [known as “polyuria”]) are common with long-term (chronic) steroid use

### **EXPECTED COURSE AND PROGNOSIS**

- Depend on underlying cause
- Many causes of itchiness in pets are extremely frustrating to control

## KEY POINTS

- Many different unrelated diseases may contribute to itchiness (pruritus) and control of one disease does not mean that other causes cannot be contributing to itchiness or cannot occur later
- Multiple causes (such as flea allergy, inhalant allergy, and bacterial skin infection [known as “pyoderma”]) commonly are present in a single patient
- Elimination of bacterial skin infection (pyoderma) and flea-associated disease may not be enough to significantly reduce itchiness
- Food-allergy and inhalant-allergic animals may do well during the winter season with a hypoallergenic diet, only to become itchy during the warmer months in association with inhalant allergies

