

Itchiness

(Pruritus)

Basics

OVERVIEW

- "Pruritus" is the sensation that triggers itching or itchiness; it is the itching sensation that provokes the desire to scratch, rub, chew or lick; a component of the innate immune response
- Pruritus is an indicator of inflamed skin
- The term is not a diagnosis but rather is a description of a clinical sign; underlying identification and treatment of the cause is necessary for long-term treatment and to reduce need for medical therapy

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs
- Cats

SIGNS/OBSERVED CHANGES IN THE PET

- Scratching
- Licking
- Biting
- Rubbing
- Chewing
- Self-trauma
- Inflammation of the skin (known as "dermatitis")
- Hair loss (known as "alopecia"); hair loss without inflammation may be the only sign in some cats
- 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 pet 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"); allergy to *Malassezia* (a yeast found on the skin), (known as "*Malassezia* hypersensitivity")
- Bacterial or fungal infections—*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
- 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
- The use of mechanical restraint (such as an Elizabethan collar) can be a helpful option, but is seldom feasible in long-term treatment
- Treat for secondary infections, which are common
- Identify and treat underlying cause to help reduce need for long-term medical therapy; long-standing cases—your veterinarian will offer to refer to a specialist (dermatologist)

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 most itchy pets; topical steroids probably are the most useful topical medications; a triamcinolone-containing prescription spray (Genesis®) is effective in decreasing itchiness (pruritus); side effects possible if overused
- For localized areas of itchiness or skin inflammation, sprays, lotions and creams/ointments are most appropriate
- If the itching involves many areas or widespread areas, shampoos and conditioners will be recommended; colloidal oatmeal is common in all forms of topical therapy; its duration of effect usually is short

MEDICATIONS ADMINISTERED BY MOUTH OR BY INJECTION (SYSTEMIC THERAPY)

- Specific diagnosis is required for successful outcome; see handouts on the various conditions for more detailed treatment plans
- Scabies—scabicidal therapy
- Food hypersensitivity—diet trial
- Flea bite hypersensitivity—adequate flea control
- Secondary infections will be identified and treated accordingly
- Steroids by mouth (for example prednisolone) to decrease inflammation and itchiness of the skin; rapid onset may be achieved with injection (dexamethasone for example); dose adjustment for intermittent or pulse treatment; adjunct therapy
- Cyclosporine oral therapy to dampen the immune response; slow onset of activity (1-4 weeks)

- Oclacitinib—a new drug for dogs over 12 months of age; temporary relief
- For pets 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 (for dogs, hydroxyzine, diphenhydramine, fexofenadine, clemastine, for cats, chlorpheniramine) to dampen inflammation and itching
- Fatty acids are available in powders, liquids, and capsules; they help block pathways that lead to inflammation, but may require 6–8 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 reduce 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 for dogs such as amitriptyline, fluoxetine, and gabapentin

Follow-Up Care

PATIENT MONITORING

- Patient monitoring is imperative; pets should be examined periodically to evaluate response to treatment; there
 may be more than one trigger, some may be seasonal—to control the situation getting the "itch threshold"
 reduced is essential
- Pets receiving long-term (chronic) medications should be evaluated regularly for potential side effects as well as occurrence of new contributing factors
- Repeat skin scrapes and other tests may previously have been normal, but will be re-recommended if symptoms return

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 pets may do well during the winter season with a hypoallergenic diet, only to become itchy during the warmer months in association with inhalant allergies

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