

Pruritus

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A patient with the primary client complaint of *itch* represents a common dilemma in skin disease.

Overview

In each canine or feline patient, several causes can contribute to overall pruritus. To identify specific causes and treat each patient accordingly, practitioners need a general understanding of the multiple causes of pruritus: yeast and bacterial infections, ectoparasites, atopic dermatitis complex (including environmental or food allergy), or atopic-like dermatitis.

Clinical Signs & Diagnosis

Historical and physical clues identified during client discussion can narrow the diagnosis (see **Clinical Features of Pruritus: A Mental Chalkboard**, page 75). Age and nature of onset can be helpful; although parasites or food allergy can occur at any age, environmental allergy often presents in young dogs and does not commonly begin in dogs older than 3 to 4 years of age. Evidence of contagion suggests parasite infestation or dermatophytosis (especially in cats). Concomitant GI signs may indicate food allergy.

Distribution is often (although not always) characteristic. Dorsal lumbosacral distribution suggests flea allergy dermatitis until proven otherwise. If distribution includes feet, face, ventrum, and/or pinnae (in any combination), environmental or food allergy should be considered. If ear margins, elbows, or ventrum are affected, scabies should be considered.

How I Treat Pruritus

- Provide cause-specific treatment when possible.
- Consider short-term antipruritic treatment.
- Consider appropriate medicated shampoo.
- Follow up by phone.
- Recheck in 2 weeks, if necessary.
- For chronic conditions, formulate a long-term management plan.

Basic in-house diagnostic procedures (eg, skin scrapings, skin cytology) can help rule out common and obvious causes. Fleas and *Cheyletiella* spp mites can be identified by brushing or combing the hair coat. Superficial and deep scrapings and hair pluckings are all required when looking for mites. Samples from lesions should be obtained by impression smear, scotch tape, or other collection methods to confirm staphylococcal or yeast infection on cytology.

MORE ►

Diagnostic Criteria for Canine Atopic Dermatitis

If 5 or more of these 8 criteria are confirmed and other differentials have been ruled out, atopic dermatitis is highly likely¹:

- | | | |
|---|---|---|
| <input type="checkbox"/> Age of onset <3 years | <input type="checkbox"/> Front paws affected | <input type="checkbox"/> Dorsal lumbosacral area unaffected |
| <input type="checkbox"/> Patient lives mostly indoors | <input type="checkbox"/> Ear pinnae affected | <input type="checkbox"/> Chronic or recurrent yeast infection |
| <input type="checkbox"/> Corticosteroid-responsive pruritus | <input type="checkbox"/> Ear margins unaffected | |

How I Treat Pruritus

- ✓ **Provide cause-specific treatment when possible.**
 - If bacterial or yeast infection is identified, treat appropriately and without steroids.
 - If moist, greasy, odiferous dermatitis with pronounced pruritus is present, treat for yeast, even if none is found on cytology.
 - If parasites are identified, treat accordingly.
 - Scabies mites can be difficult to find; treat empirically when scabies is suspected.
- ✓ **Consider short-term antipruritic treatment if no cause or infection is determined.**
 - Glucocorticoids (systemic or topical) and oclacitinib (Apoquel, apoquel.com; dogs only) are the most rapid-acting and effective for immediate use.¹
 - Cyclosporine A may take several weeks to work, making it less desirable for quick, short-term relief.
 - Antihistamines are not typically effective.
- ✓ **Consider appropriate medicated shampoo.**
 - Before prescribing shampoo, confirm the client can bathe the patient.
- ✓ **Follow up by phone at 5–7 days to assess response, make a plan, and establish owner expectations.**
 - Ask the owner to call with a progress report.
 - This reinforces clinician's commitment and enables prompt recognition of client frustration.
 - Follow up via phone if client does not call.
 - Uncomplicated parasitic and infectious causes should respond to treatment, and further action may not be necessary.
 - If response is minimal or incomplete or relapse occurs, schedule recheck at 2 weeks.
 - Plan for additional patient time, and inform the client that additional diagnostics may be indicated.
- ✓ **Recheck in 2 weeks, if necessary.**
 - Determine what has and has not improved.
 - Treatment of secondary infection will often provide a clearer picture of underlying disease.
 - Consider starting hypoallergenic diet trial, if indicated.
 - If a canine patient fulfills clinical diagnostic criteria for atopic dermatitis (see **Diagnostic Criteria for Canine Atopic Dermatitis**), consider testing for environmental allergy.
 - If patient still has substantial lesions, consider skin biopsy or culture and susceptibility testing.
- ✓ **For chronic conditions, formulate a long-term management plan that is effective and acceptable to the client.**
 - Combine multiple therapies to provide effective relief that is affordable and convenient for the client while minimizing potential adverse effects.
 - For patients with food allergy, emphasize lifelong dietary restriction.
 - For patients with atopic dermatitis, recommend allergy testing and immunotherapy (with conventional allergy shots or new sublingual method).
 - For patients with atopic or atopic-like dermatitis, implement additional long-term management elements:
 - Medicate with cyclosporine A (dog, cat) or oclacitinib (dog).
 - Medicate with a topical or systemic corticosteroid (perhaps with an antihistamine to lower required dose).
 - Prescribe frequent bathing with appropriate medicated or cleansing shampoo.
 - Institute epidermal barrier support, including fatty-acid supplementation and topical methods. ■ **cb**

Clinical Features of Pruritus: A Mental Chalkboard

- ✓ Sudden onset? Think parasites.
- ✓ Gradual onset? Think allergy or infection.
- ✓ If severe, scabies is a prime consideration.
- ✓ If seasonal, think flea or environmental allergy (vs food allergy).
- ✓ If initial itch developed into a rash, primary allergic or parasitic cause with secondary infection is most likely.
- ✓ If initial presentation was a rash that itched, infection is most likely.
- ✓ If pruritus responds well to corticosteroid therapy, atopic dermatitis or flea allergy is more likely.
- ✓ If pruritus responds poorly to corticosteroid therapy, scabies, yeast dermatitis, or food allergy is more likely.

See Aids & Resources, back page, for references & suggested reading.



GI EXCHANGE:

Benefits of colostrum for adult animals

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Why is colostrum important?

It is well known that colostrum, found in mothers' milk, is rich in immunoglobulins, growth factors and other active compounds that stimulate the immune systems of newborn puppies and kittens, and support gastrointestinal (GI) health. What is less well understood is that colostrum has also been found to have immune and GI benefits for growing and adult animals.

How does colostrum help growing and adult dogs and cats?

Nestlé Purina research shows that dietary supplementation with colostrum:

- stabilizes intestinal microflora, which helps reduce risk of stress-related diarrhea, improves GI health and supports nutrient absorption;
 - supports greater titers against canine distemper virus four to 10 months postvaccination;
 - increases levels of fecal immunoglobulin A (IgA), which supports the gut's protective function; and
 - helps promote a healthy immune system.
- Purina Veterinary Diets® EN Gastroenteric® Canine and Feline dry formulas are the only therapeutic diets with a natural source of immunoglobulins from colostrum.

What have studies shown about the benefits of colostrum for GI problems?

We evaluated the ability of colostrum to enhance gut and immune health in 24 sled dogs ranging from 2 to 7 years of age. Dogs were fed a control diet or a control diet

supplemented with bovine colostrum. We monitored gut and immune health during the 40-week study, which included exercise stress.

Dogs fed the colostrum-supplemented diet had increased intestinal microflora diversity, which reduced the opportunity for bacterial pathogens. They had more stable microbial populations following stress, which helped reduce the risk of stress-related diarrhea. They had increased fecal IgA levels, which indicated enhanced local immune status. And, the colostrum-supplemented dogs maintained higher antibody titers for months longer following canine distemper virus vaccination, suggesting an enhancement in systemic immune status.¹



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1. Satyaraj E, Reynolds A, Pelker R, et al. Supplementation of diets with bovine colostrum influences immune function in dogs. *British Journal of Nutrition*. doi:10.1017/S000711451300175X.

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