

DERMATOLOGY

Pruritus in Dogs

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Pruritus (itch) in dogs is defined as an unpleasant sensation that provokes specific behaviors such as scratching, rubbing, and licking paws and is considered the most common clinical sign exhibited by dogs presented to veterinarians for skin disease.¹ It can affect dogs' quality of life and become a source of frustration for owners.^{2,3}

The most common possible causes of pruritus in dogs fall into 3 main categories: (1) ectoparasites (fleas, ticks, *Sarcoptes* mites), (2) infections (bacterial, yeast, and/or fungal), and (3) allergies (food- and/or environmentally induced atopic dermatitis).⁴ Pemphigus foliaceus and cutaneous epitheliotropic lymphoma are less common causes of pruritus.^{5,6} A systematic diagnostic workup to identify the cause of pruritus is essential for appropriate treatment recommendations and clinical outcomes.

ECTOPARASITES

The first step in reaching an appropriate diagnosis and treatment recommendation is to look for ectoparasites by performing flea combing (for fleas and ticks) and skin scrapings (for mites). Sarcoptic mange is among the most pruritic dermatoses⁷; if *Sarcoptes* mites are suspected even with negative scraping results, a treatment trial is warranted.

If pruritus persists despite infection treatment/rule-out and regular parasite control, an allergy workup should be started.^{9,10}

INFECTIONS

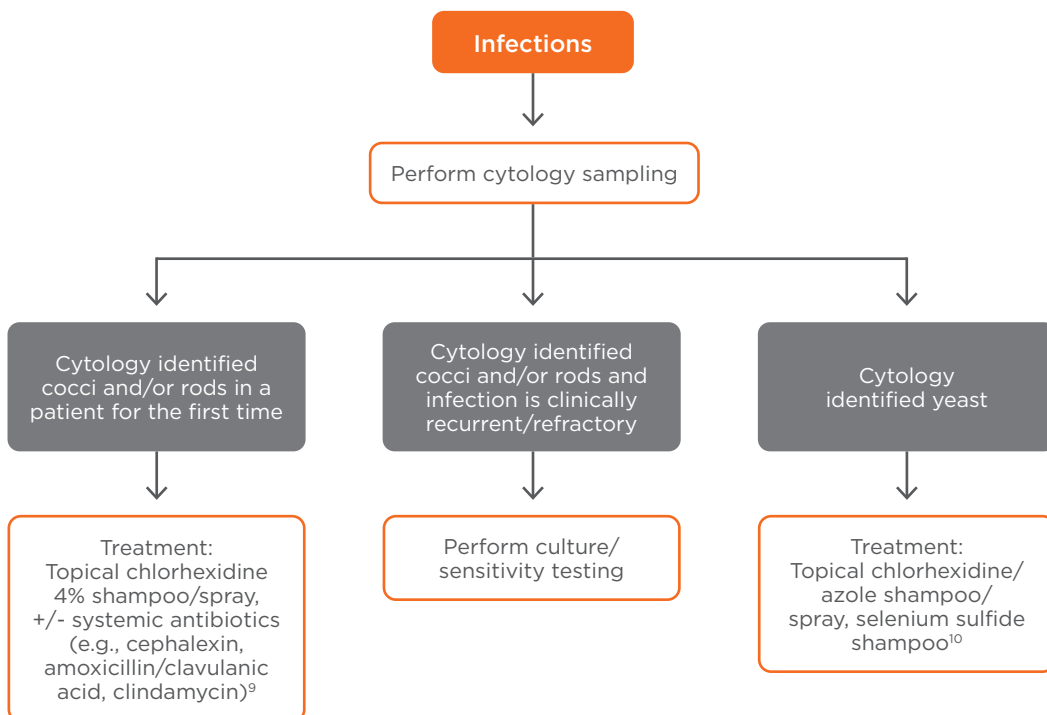
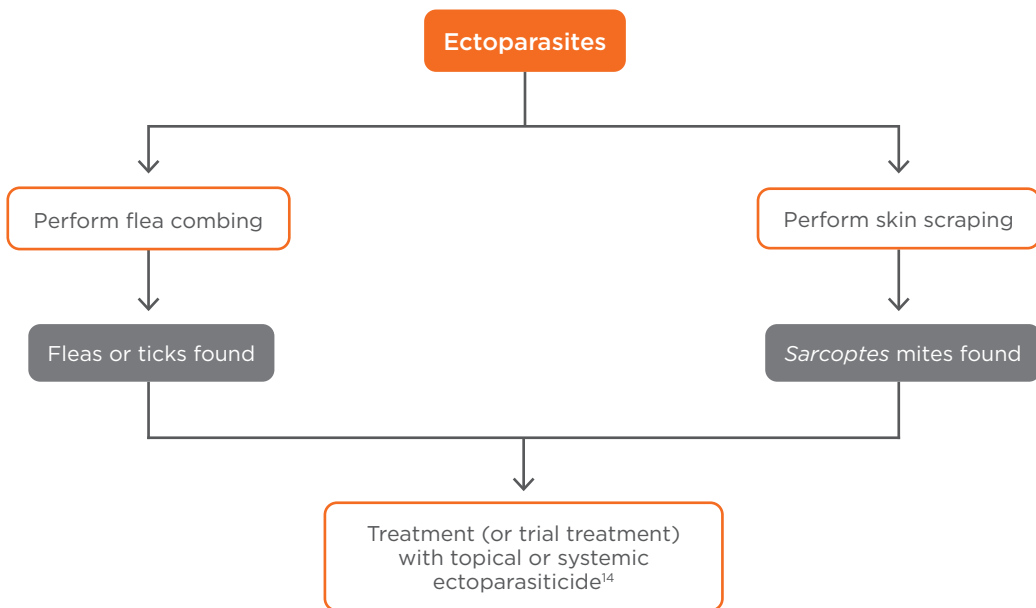
To look for bacteria and/or yeast in pruritic lesions, skin cytology sampling (impression smear or tape) should be performed. If cytology reveals inflammatory cells (neutrophils and macrophages) but no organisms, dermatophytosis should be considered and a dermatophyte test medium culture performed.⁸

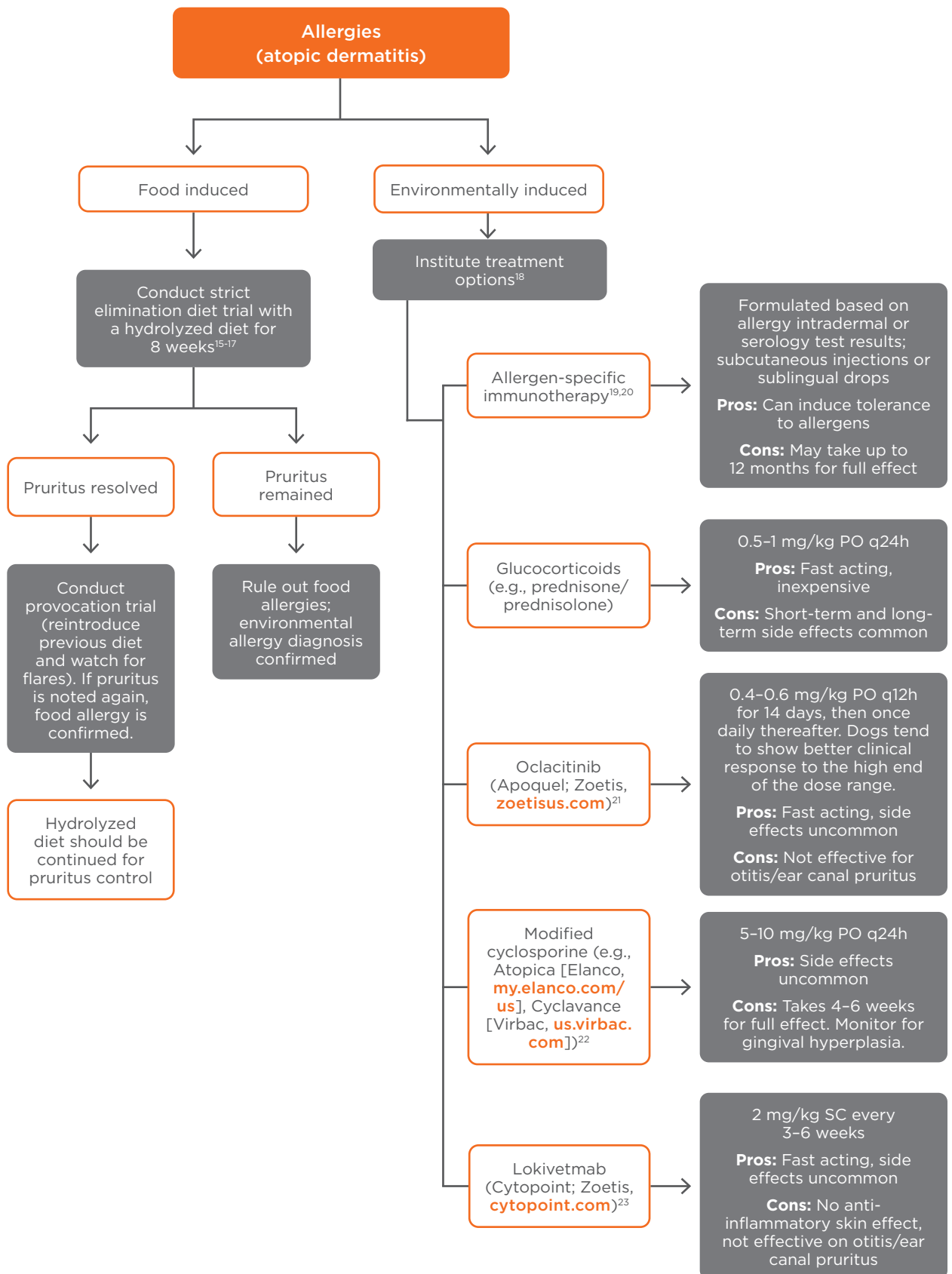
ALLERGIES

If pruritus persists despite infection treatment/rule-out and regular parasite control, an allergy workup should be started.^{9,10} Atopic dermatitis caused by food allergy is clinically indistinguishable from that caused by environmental factors.¹¹ Thus, identifying a possible role of food is a critical component of allergy management. Although different serology and salivary tests have been advocated for the diagnosis of food allergies, there is no scientific evidence for their use as diagnostic tests; therefore, a strict diet trial with a hydrolyzed diet is still the recommended approach.^{12,13} Antipruritic medications can be administered throughout the food trial, but they should be discontinued before the end of the trial.

Environmental allergy is a clinical rule-out diagnosis. Allergy tests (intradermal skin test or serology) are not diagnostic tests and should be used only to select environmental allergens to include in allergen-specific immunotherapy if the owner chooses to pursue this treatment option.¹³ Antihistamines and topical glucocorticoids can be used as add-on medications to any treatment protocol for environmental allergies for better pruritus control.

The following algorithms provide further details on the diagnostic workup and treatment recommendations for pruritus in dogs.





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