

2023 AAHA Management of Allergic Skin Diseases in Dogs and Cats Guidelines

Julia Miller, DVM, DACVD,[†] Andrew Simpson, DVM, MS, DACVD,[†]
 Paul Bloom, DVM, DACVD, DABVP (Canine and Feline), Alison Diesel, DVM, DACVD,
 Amanda Friedeck, BS, LVT, VTS (Dermatology), Tara Paterson, DVM, MS, Michelle Wisecup, DVM,
 Chih-Ming Yu, DVM, MPH, ECFVG

ABSTRACT

These guidelines present a systematic approach to diagnosis, treatment, and management of allergic skin diseases in dogs and cats. The guidelines describe detailed diagnosis and treatment plans for flea allergy, food allergy, and atopy in dogs and for flea allergy, food allergy, and feline atopic skin syndrome in cats. Management of the allergic patient entails a multimodal approach with frequent and ongoing communication with the client. Obtaining a comprehensive history is crucial for diagnosis and treatment of allergic skin diseases, and the guidelines describe key questions to ask when presented with allergic canine and feline patients. Once a detailed history is obtained, a physical examination should be performed, a minimum dermatologic database collected, and treatment for secondary infection, ectoparasites, and pruritus (where indicated) initiated. The process of diagnosing and managing allergic skin disease can be prolonged and frustrating for clients. The guidelines offer recommendations and tips for client communication and when referral to a dermatologist should be considered, to improve client satisfaction and optimize patient outcomes. (*J Am Anim Hosp Assoc* 2023; 59:255–284. DOI 10.5326/JAAHA-MS-7396)

AFFILIATIONS

Animal Dermatology Clinic, Louisville, Kentucky (J.M.); VCA Aurora Animal Hospital, Aurora, Illinois (A.S.); Allergy, Skin and Ear Clinic for Pets, Livonia, Michigan (P.B.); Animal Dermatology Clinic-Austin, Austin, Texas (A.D.); Texas A&M University, College Station, Texas (A.F.); St. George's University, St. George's, Grenada (T.P.); The Ohio State University, Columbus, Ohio (M.W.); U-Vet Animal Clinic, Newburgh, Indiana (C-M.Y.)

CONTRIBUTING REVIEWERS

Lindsay McKay, DVM, DACVD, VCA Arboretum View Animal Hospital
 Karen Trainor, DVM, MS, DACVP, Innovative Vet Path
 Amelia White, DVM, MS, DACVD, Auburn University

Correspondence: guidelines@aaha.org

[†]J. Miller and A. Simpson are the cochairs of the AAHA Management of Allergic Skin Diseases in Dogs and Cats Guidelines Task Force.

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These guidelines were prepared by a task force of experts convened by the American Animal Hospital Association. This document is intended as a guideline only, not an AAHA standard of care. These guidelines and recommendations should not be construed as dictating an exclusive

protocol, course of treatment, or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to each individual practice setting. Evidence-guided support for specific recommendations has been cited whenever possible and appropriate. Other recommendations are based on practical clinical experience and a consensus of expert opinion. Further research is needed to document some of these recommendations. Drug approvals and labeling are current at the time of writing but may change over time. Because each case is different, veterinarians must base their decisions on the best available scientific evidence in conjunction with their own knowledge and experience.

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AOE (allergic otitis externa); ASIT (allergen-specific immunotherapy); DTM (dermatophyte test medium); FASS (feline atopic skin syndrome); OTC (over the counter); PO (*per os*); SBF (superficial bacterial folliculitis); SOC (spectrum of care)



Technician utilization recommendation



Spectrum of care recommendation



Referral recommendation

Introduction

An itchy pet is one of the most common reasons a client seeks veterinary care. Allergic skin diseases can cause not only significant discomfort and distress to the individual animal but also stress and disruption to the pet's family members. Because of the complex nature of allergic skin disease, diagnosis can be time-consuming and may require multiple follow-up visits before a final diagnosis is achieved. Patients with allergic skin disease often require lifelong management to optimize their quality of life. These guidelines offer a step-by-step approach to diagnose and manage flea allergy, food allergy, and atopy in the dog and cat.

- Section 1 describes the steps in diagnosing the canine patient with allergic skin disease.
- Section 2 describes initial and long-term management of canine allergic skin diseases and acute flares.
- Section 3 addresses diagnosing allergy in the feline patient, including clinical presentations of dermatitis in cats and key differences between cats and dogs.
- Section 4 describes initial and long-term management of feline allergic skin diseases and acute flares.
- Section 5 provides an overview of diagnosis and treatment of allergic otitis externa.
- Section 6 presents spectrum of care considerations for managing allergic skin diseases, including referral recommendations, telehealth, and communication tips.
- Section 7 discusses the vital role of veterinary technicians in the management of allergic patients and how to optimize their involvement in these cases.
- Section 8 offers key messaging points for client communication.

These guidelines are designed to simplify the path to diagnosis and management of canine and feline allergic skin diseases, while emphasizing a multimodal approach for the patient and effective client communication to ensure the best possible outcome.

Section 1: Diagnosing the Allergic Canine Patient

Top 3 Takeaways:

1. A detailed history, including a review of previous medical records, should be obtained. Information regarding seasonality, pruritus level, ectoparasite prevention, and response to previous therapies are all paramount in the workup of the pruritic dog.
2. A minimum dermatologic database should be performed including skin cytology, flea combing, skin scrapings, and ear cytology (if ear disease is present).
3. Atopy is a diagnosis of exclusion. Allergy testing (intradermal or serum) to identify allergens should *only* be performed if immunotherapy is planned.

Overview

Diagnosing allergic skin disease in the canine patient requires the veterinary team to be well versed in obtaining accurate clinical histories that include key questions about the dog's level of pruritus, the

environment, and any other medical conditions present. A minimum dermatologic database should also be performed on pruritic patients to assess for the presence of ectoparasites and skin infections. Because atopy is a diagnosis of exclusion, the process may be time-consuming and frustrating for clients. Clear communication regarding timelines and expectations is crucial for successful results.

Step One: Clinical History and Dermatologic Physical Examination

Clinical History

A detailed history should provide essential information about the dog's clinical signs, patterns of pruritus, and environment, which will assist the practitioner in diagnosing the specific allergic disease. When asking a client about the presence and intensity of pruritus, it is important to clearly explain the signs of pruritus to owners who may not readily recognize them. Clients may not understand that scratching, biting, chewing, licking, gnawing, rubbing, or rolling can all be evidence of an itchy dog. Pruritus scales (usually ranging from 1 to 10 with 10 representing constant itching) can be a helpful tool to use with clients. The validated canine Pruritus Visual Analog Scale can be found at <https://www.vetdermclinic.com/pruritus-visual-analog-scale-canine/>.

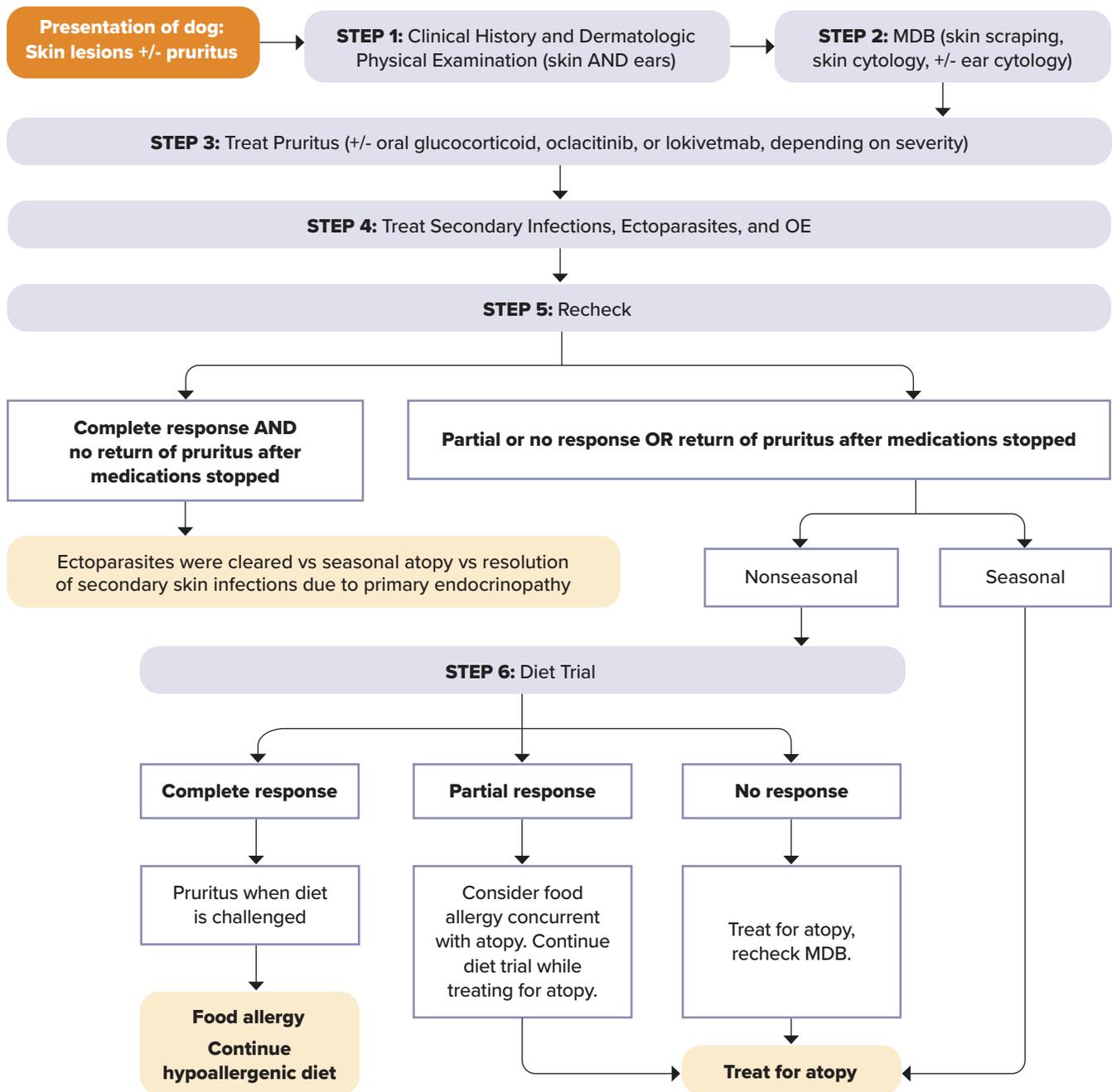
Educating clients and helping them to understand that each question in the client history provides significant diagnostic clues can make the process seem less of a formality and more like progress toward the mutual goal of a more comfortable and happier dog. Engaging clients in this way can create the sense that everyone is on the same team, for what may be a long road ahead.



Veterinary technicians are an invaluable asset in dermatologic appointments. From taking comprehensive clinical histories to educating clients, technicians serve a vital role in the workup and successful management of pruritic patients.

Key Questions for Clinical History

1. *What was the distribution of the pruritus initially? What is it now? Have there been changes?*
Note that only ectoparasites have a predictable distribution. The distribution of pruritus for atopy or food allergy is identical.¹
2. *Is the pruritus seasonal, year-round, or year-round with a seasonal flare?*
Seasonal pruritus is most consistent with atopy. Year-round pruritus may be associated with food allergy, atopy due to indoor allergens, and atopy in certain geographical locations where outdoor allergens lack seasonality.
3. *What was the age of onset?*
Food allergies may start at any age, but because atopy has a more defined age of onset (i.e., clinical signs starting between 6 mo and 4 yr of age), food allergy may be prioritized in the very young and older patients.² Pruritus due to ectoparasites may present at any age.



MDB, minimum dermatologic database; OE, otitis externa

FIGURE 1

Diagnosing Allergic Skin Disease in the Canine Patient.

4. *What previous treatments were prescribed and how effective were they?*
Response to treatments such as oclacitinib or lokivetmab will vary among allergic patients. Response to glucocorticoids does not help narrow the cause of pruritus as any pruritic disease may respond to antipruritic doses of glucocorticoids. Failure to respond to glucocorticoids, however, may suggest the presence of secondary infections

(bacterial or *Malassezia*), ectoparasites, and/or food allergy. In addition, an incomplete response to antibiotic therapy may indicate the presence of antimicrobial resistance. Commonly, antimicrobials and antipruritic therapies are prescribed and discontinued at the same time. To truly assess response to these therapies, it is helpful to avoid discontinuation of these medications at the same time.

5. *Are other pets or humans affected?*

Pruritus affecting other pets or humans strongly suggests the presence of ectoparasites such as fleas, scabies, or *Cheyletiella*.

6. *Is there any vomiting, soft stool, or increased flatulence that may suggest a food allergy?*

In addition to cutaneous signs, 19–27% of food-allergic dogs will also exhibit vomiting, soft stool, and/or diarrhea.³ Using a fecal score chart can be beneficial (see https://www.proplanveterinarydiets.ca/sites/g/files/2021-02/180107_PPPVD-Fecal-Scoring-Chart-UPDATE-EN-FINAL.pdf).

Dermatologic Physical Examination

Perform a complete physical examination, including flea combing and an otoscopic examination. An otoscopic examination should be performed even if the owner does not report otic pruritus because it is common for dogs to not show overt clinical signs of ear disease until it is moderately severe. Note that up to 50% of allergic dogs may have otitis externa¹ and this may be the first and only clinical signs of allergic disease. Be sure to assess the skin in areas where inflammation may be less obvious, including the paws, claws, perianal skin, and intertriginous areas such as the axillary and inguinal regions and skin folds (see Figure 2). A complete nose-to-tail examination is essential and may require sedation if an animal is very uncomfortable or resistant to handling.



Flea combing should always be performed as part of the initial physical examination.

Step Two: Minimum Dermatologic Database

A minimum dermatologic database should be collected as the next step and consists of the following:

- Cytology of skin and ears (where evidence of ear disease is present)
- Skin scrapings (deep/superficial to assess for both *Demodex* and *Sarcoptes* mites)



*If there are financial constraints, consider a therapeutic trial with an isoxazoline, rather than performing skin scrapings. However, be aware that although uncommon, failures in the treatment of mites using isoxazolines have been anecdotally reported. As alternatives to traditional deep skin scrapings, plucking hairs (trichogram) or acetate tape samples on pinched skin may be able to detect *Demodex* mites in areas that are too sensitive for a deep skin scrape.*

- ± Dermatophyte test medium (DTM) culture (depending on regional prevalence, history, and index of suspicion)



Depending on state regulations, collecting samples for a minimum dermatologic database may be assigned to a veterinary technician.

Step Three: Treat Pruritus

A critical aspect in managing both the patient and the owner's quality of life is reducing pruritus. Consider the use of an antipruritic agent (glucocorticoids, oclacitinib, or lokivetmab) and/or topical therapy (see Table 1 and Section 2 for more information). These therapies may be less effective in the face of active infection; therefore, appropriate diagnosis and treatment of secondary infections is critical before assessing response to antipruritic therapy.

Step Four: Treat Secondary Infections and Ectoparasites

Secondary bacterial and *Malassezia* infections must be treated concurrently with controlling pruritus and diagnosing the underlying allergic disease (see Tables 4 and 5). Otitis externa, if present, should also be treated (see Section 5). Prescribe a flea and tick preventive if the dog is not currently receiving one and discuss compliance with the client. The guidelines task force prefers an oral isoxazoline as this drug class offers flea, tick, and mite prevention and allows for routine bathing. All parasiticides may lower seizure threshold, and consultation with a neurologist is recommended in severely epileptic patients.

Step Five: Recheck, Verify Medication, and Assess Response to Treatment

Assessing the response to medications such as flea preventives and antipruritic drugs is a key step in the diagnostic process. It is important to ensure that the veterinary team and the client are all on the same page about medication administration, duration of therapy, and follow-up examinations. Response to therapy should be assessed 14 days after initiating therapy, and this is ideally done with an in-person recheck examination. However, if a physical examination is not feasible for the client, this would be a reasonable application for a telehealth appointment. If multiple medications were prescribed, it is recommended to discontinue these one at a time to help determine which, if any, were responsible for the response. It is not ideal to stop antipruritic and antimicrobial therapies at the same time as this muddies the water and does not allow you to interpret what was causing the patient's itch—the infection or the allergic inflammation.

If the dog shows a full response to treatment (i.e., resolution of pruritus, resolution of infection, skin lesions, etc.) after being weaned off antipruritic therapy at the time of reassessment:

1. The diagnosis may be one of three things: ectoparasitism that has now resolved, secondary infections that have now resolved, and/or seasonal atopy.



Severe erythema affecting the pinna in an allergic patient.



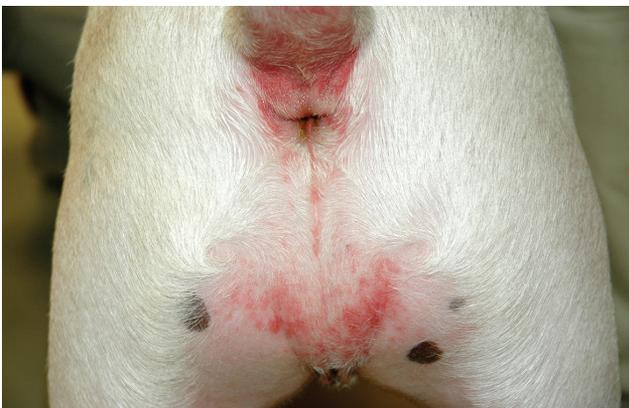
Severe muzzle, periocular, and intertriginous (neck) erythema with hypotrichosis in an allergic patient.



Moderate dorsal interdigital erythema in an allergic patient.



Erythema and lichenification affecting the skin of the muzzle, periocular area, ventrum, inguinal area, and limbs in an allergic patient.



Erythema of the perianal and perivulvar skin in an allergic patient.

Photos courtesy of Julia Miller, DVM, DACVD

FIGURE 2

Clinical Presentation of the Pruritic Canine Patient.

TABLE 1**Antipruritic and Anti-inflammatory Medications for Dogs**

Drug Name	Oclacitinib ¹	Lokivetmab ²	Cyclosporine ³	Glucocorticoids ⁴
Mode of action	JAK-STAT inhibitor that blocks signaling from proinflammatory and pruritogenic cytokines	Caninized monoclonal antibody that neutralizes the pruritogenic cytokine IL-31	Calcineurin inhibitor that modulates T-cell function	Influences gene expression of proinflammatory cytokines
Administration	PO q 12 hr up to 14 days, then reduce to q 24 hr	SC injection at veterinary office q 4-8 wk	PO q 24 hr	PO q 12-24 hr with taper Injectable not recommended
Time to onset	Hours	Hours to 3 days	4-6 wk	Hours
Age	>1 yr	Any	>6 mo	Any
Weight	>3 kg	Any	>1.8 kg	Any
Health restrictions	History of demodicosis History of neoplasia Serious infection	None	History of neoplasia Renal insufficiency	Congestive heart failure Diabetes mellitus Hyperadrenocorticism Hypertension
Adverse reactions	Vomiting Diarrhea Nonspecific dermal masses Demodicosis Pyoderma	Vomiting Diarrhea Lethargy Pain at injection site Rare: Hypersensitivity effects (urticaria, facial edema, anaphylaxis)	Vomiting Diarrhea Gingival hyperplasia Hirsutism Cutaneous papillomatosis Drug interactions	Polyuria/polydipsia Polyphagia Panting Obesity Muscle wasting Iatrogenic hyperadrenocorticism Congestive heart failure

JAK-STAT, Janus kinase signal transducers and activators of transcription; PO, orally; SC, subcutaneously.

1 Apoquel (oclacitinib tablet). Package insert. Zoetis, 2020.

2 Cytopoint. Package insert. Zoetis, 2015.

3 Atopica (cyclosporine capsules). Package insert. Elanco, 2020.

4 Saridomichelakis MN, Olivry T. An update on the treatment of canine atopic dermatitis. *The Vet Jour.* 2016;207:29–37.

2. If a secondary infection was present, it may have been the primary cause of the pruritus. Primary diagnoses to consider then include:
 - a. Ectoparasites
 - b. Seasonal atopy
 - c. Endocrinopathy
 - i. If other clinical signs are present
 - ii. Note that these conditions are not pruritic unless secondary infection is present

Next Steps

1. Continue routine use of flea/tick preventives.
2. If receiving antimicrobial therapy and the infection has resolved, continue antimicrobial therapy for 7 days beyond clinical and cytological resolution (see Section 2 for more information).
3. If the history supports seasonal atopy, discuss management options (see Section 2).
4. If the history supports an endocrinopathy, recommend additional diagnostics.

5. If there is no history of previous skin or ear disease or an uncertain history, propose observing for recurrence, but also discuss the possibility of a future diagnosis of allergic disease.

If the dog is showing partial or no response while on an appropriate antipruritic agent:

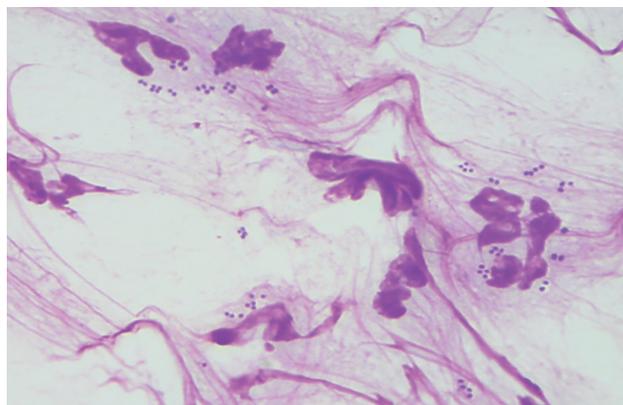
1. Repeat cytology.
2. If evidence of bacterial infection is present (Figure 3) and a systemic antibiotic has already been used:
 - a. Perform an aerobic bacterial culture and withhold systemic antibiotics pending culture and susceptibility results.
 - b. Choosing a second antibiotic empirically is strongly discouraged owing to the risk of increasing incidence of antimicrobial drug resistance. The cost of using the wrong antibiotic can exceed the cost of culture.
 - c. If you MUST choose a second antibiotic, be sure to change the class of antibiotic (e.g., do not change from one beta lactam antibiotic to another). See Table 4 for guidance on choosing first- and second-tier antibiotics.
3. Discuss the owner's ability to increase the frequency of topical antimicrobial treatment—often, more intense topical treatment eliminates the need for systemic antibiotics.⁴
4. If *Malassezia* yeasts are identified cytologically from lesioned skin (Figure 3), then antifungal treatment should be initiated topically and/or systemically based on clinician discretion. The number of *Malassezia* yeasts noted cytologically does not necessarily correlate with the severity of the disease. Addressing *Malassezia* is imperative, especially in individuals with a hypersensitivity response to these organisms, which in turn worsens clinical signs.⁵
5. If lesions and/or infections have resolved but pruritus persists, the dog has either atopy or food allergy.
 - a. Treatment for allergic skin disease is individualized for THIS dog and THIS client.
 - b. In general, food allergy is less steroid responsive than atopy.¹
 - c. If a diet trial is not possible (e.g., the client is not able to comply or the environment of the dog is not conducive), then symptomatic treatment for atopy should be initiated and response to therapy should be assessed.



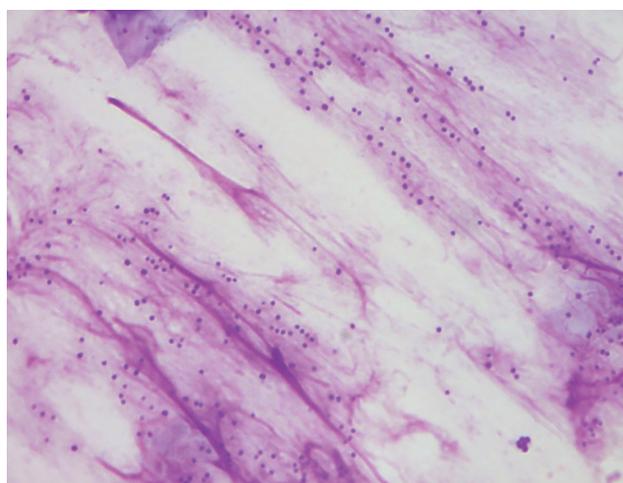
The guidelines task force acknowledges that a properly performed diet trial is difficult to conduct and client compliance can be challenging. The task force recommends considering a consultation with or referral to a veterinary dermatologist before beginning a diet trial.

Step Six: Diet Trial

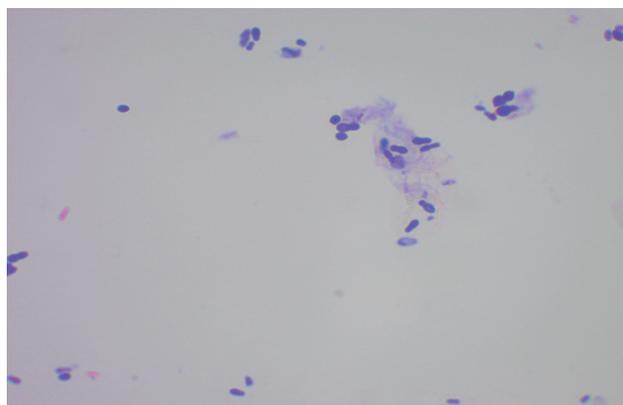
Because there are no historical or physical examination findings that can differentiate atopy from food allergy, a diet trial is an important step in the diagnostic process. Other than the seasonality associated with atopy, a higher incidence of gastrointestinal signs in food-allergic animals, and the possibility that the pruritus may be less steroid responsive in food-allergic dogs, there are no differences between the diseases. The previously held observation that an “ears and rears” pruritic pattern indicates a food allergy is no longer accurate.¹ Serum tests, saliva tests, and hair tests are of no value in the diagnosis and management of food allergy.^{1,6}



Skin cytology showing cocci bacteria.



Skin cytology showing cocci bacteria.



Skin cytology showing *Malassezia* infection.

Photos courtesy of Andrew Simpson, DVM, MS, DACVD

FIGURE 3

Cytology of Secondary Bacterial and Yeast Infections.

Diet trials should be conducted for 4–12 wk and a food challenge performed to confirm the diagnosis of food allergy if there is a positive response. Recent studies show that a fair number of food-allergic dogs may respond to strict prescription diet trials in 30 days, however, 8 weeks may be needed to capture a diagnosis in >90% of food-allergic dogs, and there is a small subset of dogs that may require 12 weeks for complete resolution of pruritus.^{7,8,9}

Antipruritic treatment is frequently needed to give relief during the initial stage of the diet trial. The guidelines task force considers glucocorticoids or oclacitinib to be appropriate choices to control pruritus. If a client is unable to give oral medication during the diet trial, lokivetmab can be considered as an alternative; however, because of the long-acting nature of this injection, the diet trial must be extended more than 60 days to allow for individual variation in duration of action. The exact length of time a diet trial must be extended is not known, and for this reason, the task force does not recommend using lokivetmab during diet trials unless absolutely necessary—for example, in a young, growing puppy where glucocorticoids are not ideal and oclacitinib is off label.

Diet Choices

Numerous prescription hydrolyzed or novel protein diets are available in a multitude of formulations, and the option to home cook a highly limited-ingredient novel protein diet is also available. Although home-cooked diets potentially offer the strictest formulation, it may be impractical for many clients in terms of labor and cost of ingredients. The choice of diet will depend on the dog's clinical and diet history, the dog's dietary preferences, and the owner's financial constraints. At present, there is no one-size-fits-all diet that is appropriate for all patients. Prescription veterinary diets, compared with over-the-counter (OTC) diets, are less likely to contain unidentified protein sources¹⁰ and therefore are the only acceptable commercial diet choices for a true elimination diet trial.



Use of OTC diets should not be recommended when conducting a diet trial. Ingredients not declared on the label have been detected in OTC diets, possibly negating the results of the trial.¹¹ However, the guidelines task force agrees that an OTC novel protein diet can be used if financial constraints make other diets impossible. The client should be warned that an OTC diet may not provide optimal results and should be considered a diet change, not a true diet trial.

During the diet trial, monthly oral flavored heartworm and flea and tick preventives should be avoided. Topical or long-lasting isoxazolines administered at the very beginning of a diet trial along with topical or injectable heartworm preventives should be considered. It is imperative to explain that the chosen diet must be the only thing

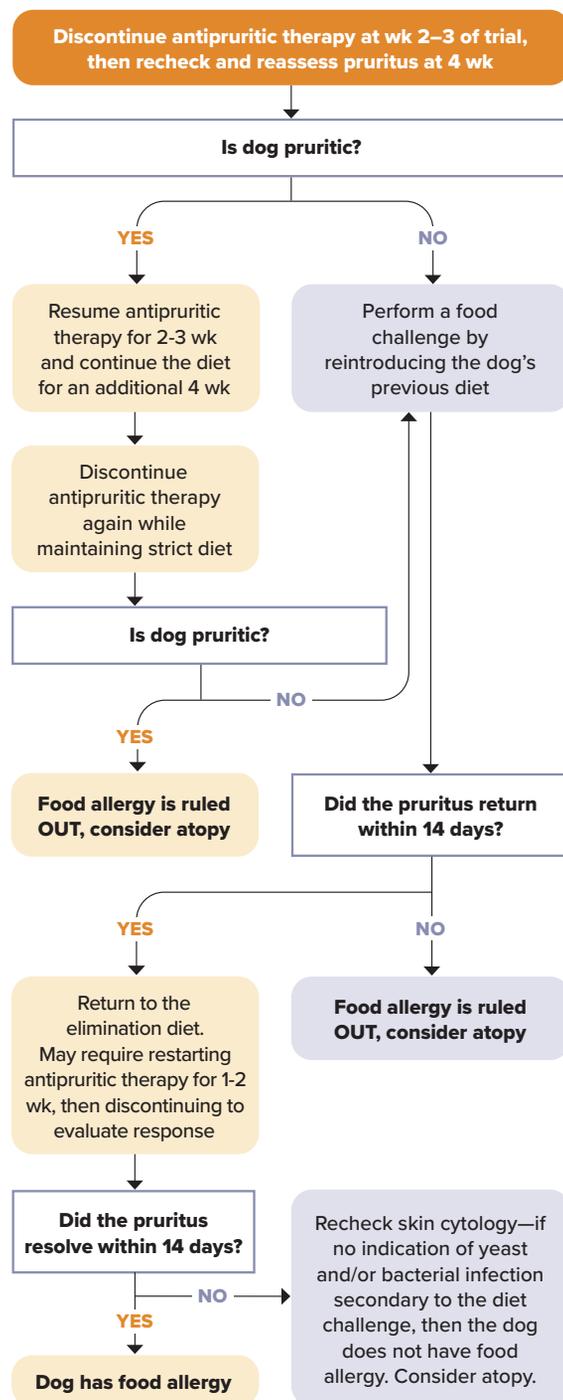


FIGURE 4
Assessing Diet Trial Results.

to “pass the lips” of the dog during the 4 to 12 wk trial. This includes pill pockets, treats, flavored toys, cat food or feces, shared water bowls, table scraps, etc.



Veterinary technicians can play an important role in discussing the choice of an appropriate diet with owners, as well as addressing any questions regarding compliance with the trial diet. A follow-up call 2–3 wk into the diet trial can be beneficial and allows the veterinary team to address any challenges or client concerns.

Assessing a Diet Trial

The final step in performing a diet trial is to challenge the patient by reintroducing the original diet. This is essential in patients that have responded well to the diet trial and is the sole means of confirming a diagnosis of food allergy. Misdiagnosis can result in unnecessary expense to the owner (due to long-term use of expensive therapeutic diets) and the potential for ongoing dermatologic problems (due to missed diagnosis of seasonal atopy or other pruritic condition). Figure 4 illustrates the steps of assessing a diet trial.



Remember that a properly performed diet trial is time-consuming for the veterinarian and client to manage, and a discussion of a referral to a veterinary dermatologist should be brought up with the client and considered.

Seasonal or Nonseasonal with Seasonal Fluctuation (Atopy)

Because atopy is a diagnosis of exclusion, if the dog is on an appropriate treatment for ectoparasites and a food allergy has not been demonstrated, then a diagnosis of **atopy** has been established. Intradermal and serum allergy testing are NOT used to diagnose atopy. It should only be used if the client is interested in administering allergy immunotherapy.

Section 2: Treating the Allergic Canine Patient

Top 3 Takeaways:

1. Treating the allergic dog is not one-size-fits-all, and a multimodal approach often yields the best results.
2. Client education, communication, and compliance is critical in the success of any treatment plan.
3. If previously successful management protocols stop working, first perform a thorough history and physical examination and return to the minimum dermatologic database to determine whether anything has changed.

Overview

The clinical management of the allergic canine patient is often viewed as frustrating by veterinarians and clients alike, as there is no one-size-fits-all treatment. In addition to the need to manage secondary infections, inflammatory flares, and individual patient responses, veterinary teams must consider client compliance, finances, and

other factors like time availability and access to transportation. Atopic patients need lifelong medical care that will require routine veterinary visits and an active working relationship with the client. Tailoring a communication-rich, multimodal approach for each individual patient will provide the best path to success.

Flea Allergy

Flea allergy dermatitis is one of the most common causes of pruritus in canine patients, and successful management relies on a three-tiered approach.

Step One: Choose the appropriate preventive.

Preventives that have potent adulticide activity should be used. Isoxazolines are now widely considered the gold standard in prevention and are recommended for initial consideration. It has been demonstrated in recent years that dogs with flea allergy dermatitis may be successfully managed with the routine administration of an oral isoxazoline.¹² The effectiveness of the preventive chosen is closely tied to accurate application of the product.

Step Two: Use the preventive year-round in all in-contact animals.

Step Three: Treat the environment in severe infestation situations.

Food Allergy

Avoiding all offending allergens, based on the diet challenge trials, is the goal for patients and clients. Here the client has two options: a veterinary prescription diet or OTC food.

An unfortunate consequence of maintaining a patient on a prescription diet is the potential for backorders. Consider other prescription diets that avoid the offending allergen or have similar ingredients. Pet food companies can provide excellent technical support and may have additional recommendations. A helpful tip is to have clients keep extra dog food bags on hand to avoid temporary backorder issues.

For some patients, control may be maintained by feeding an OTC diet that does not claim to contain the offending allergen. In a small subset of dogs, however, their severe sensitivity prohibits the use of OTC diets because of potential contamination with unlabeled proteins.^{10,13}

If a flare occurs in a patient on an OTC diet, inquire whether they were fed from a new bag of food as the formulation may have changed or the batch may contain unlabeled proteins. Investigate whether they are now displaying clinical signs of atopy in conjunction with food allergy and consider ectoparasites, as they are the leading cause for acute-onset pruritus.

Atopy

Initial Management

When choosing a management protocol, the clinician must take into consideration the level of inflammation and pruritus present and whether any secondary infections are present. If a patient is 10/10 pruritic with severely inflamed skin, a glucocorticoid may offer an effective initial treatment and a short course may effectively manage a single atopic episode. Many veterinary dermatologists would recommend the use of glucocorticoids over oclacitinib in severely inflamed skin; however, there is evidence to show that oclacitinib can have the same anti-inflammatory benefits as prednisolone in certain cases.¹⁴ Lokivetmab may be an appropriate choice when inflammation is less severe.

For mild to moderate inflammation and pruritus, oclacitinib and/or lokivetmab (see Table 1 and Table 2) may be administered. Multiple factors should be considered when choosing one of these drugs as neither medication is 100% effective, and there is significant variation in individual patient response.^{15,16} Oclacitinib is more effective in some patients, and lokivetmab is more effective in others.¹⁷

If the patient is presenting for extremely mild clinical signs, an antihistamine (see Table 3) trial may be appropriate; however, it is imperative to remember that antihistamines are best used as preventive medicine, do not perform well as monotherapy, and are not effective in treating moderate to severe inflammation or pruritus.^{18,19}

Long-term Management

A multimodal approach can promote successful long-term management, but it will take patience while assessing which option works for each patient.



If adequate control of clinical signs cannot be achieved by the third veterinary visit, then referral to a veterinary dermatologist should be presented as an option to the owner⁴⁹ to provide more effective treatment and less cost to the client in the long run. Referral could be discussed even earlier, but this may not always be necessary. Availability to be evaluated by a veterinary dermatologist could be markedly delayed in certain geographic areas, in which case more acute management by a general practitioner would be needed.

If the veterinary team moves forward with treatment, the following steps are recommended.

1. Continue antipruritic/anti-inflammatory therapy and use routinely in a preventive manner. If oclacitinib and lokivetmab have been found ineffective, cyclosporine may be considered, with the understanding that it will take 4–6 wk to be maximally effective.¹⁹



Some patients are glucocorticoid-responsive-only and/or some clients cannot afford other treatments; therefore, chronic management with glucocorticoids may be appropriate. A thorough discussion

of the potential long-term side effects and recommended monitoring must take place.

2. Consider adjunctive therapies such as veterinary-formulated essential fatty acid supplementation, specially formulated dermatologic diets, nutraceuticals, palmitoylethanolamide, probiotics, and products aimed at improving epidermal barrier dysfunction. These are all excellent options to consider in atopic patients.¹⁵
3. Topical therapy: routine bathing using shampoos with moisturizing factors (i.e., fatty acids, oatmeal, ceramides, and lipids) can be helpful as adjunctive therapy. Particularly with dogs experiencing recurrent bacterial pyoderma and/or *Malassezia* dermatitis, anti-infective shampoos, mousses, or sprays can be used routinely to help reduce the recurrence of secondary infections.
4. Allergen-specific immunotherapy (ASIT) is a safe, drug-free treatment that is effective in ~50–100% of canine patients.²¹ Clinical benefit may not appear for up to a year, and routine antipruritic/anti-inflammatory management will be required in the interim.¹⁹ Successful ASIT protocols again require diligent, educated clients who recognize that it is not a quick fix.



For allergy testing and ASIT management, referral to a veterinary dermatologist is highly recommended as tailoring individual protocols increases positive response rates.²² The preferred method of testing, whether intradermal allergy testing or serum allergy testing, is highly controversial and has not yet been established in the literature.²³ Injectable immunotherapy is considered the standard; however, sublingual immunotherapy has also been shown to be effective.^{24,25}

Management of Acute Flares

All atopic dogs will experience allergic flares regardless of how well managed they are. When a flare occurs, collect a thorough history and a minimum dermatologic database to determine whether there have been any changes in the patient's lifestyle. Look for evidence of ectoparasitism or secondary infections. If the flare is mild and secondary issues have been identified, managing the secondary issues should resolve the increased pruritus.

If the inflammatory flare is severe, the addition of a short course of glucocorticoids may be beneficial in regaining control. If glucocorticoids are contraindicated, administering twice-daily oclacitinib for a limited time (e.g., up to 14 days) or adding lokivetmab may be appropriate. Cyclosporine is not appropriate for an acute flare.

Acute Flare Factors

- Secondary infections
- Ectoparasites (fleas/mites)
- Environmental/seasonal changes
- Food challenges (holidays!)

TABLE 2

Acute Flare and Long-term Management Therapies in Dogs

Drug Name	Acute Flare	Long-term Management	Advantage/Disadvantage
Oclacitinib	✓	✓	<ul style="list-style-type: none"> • Very rapid onset of action (hours) • Does not interfere with intradermal allergy testing and immunotherapy • Antipruritic and anti-inflammatory
			<ul style="list-style-type: none"> • Not for use in dogs <1 yr of age • Do not use in the presence of deep skin or systemic infection, neoplasia, or history of neoplasia • Has not been tested in dogs receiving other long-term allergy medications such as corticosteroids and cyclosporine
Lokivetmab	✓	✓	<ul style="list-style-type: none"> • Safe for use in puppies and dogs with comorbidities (neoplasia, infection, systemic disease) • Does not interfere with intradermal allergy testing and immunotherapy • Biologic compound • Safe to use in combination with other medications
			<ul style="list-style-type: none"> • Must be administered at veterinary clinic • Variable onset of action (hours to 3 days)
Corticosteroids	✓	✓	<ul style="list-style-type: none"> • Rapid onset of action • Antipruritic and anti-inflammatory
			<ul style="list-style-type: none"> • Side effects common
Allergen-specific immunotherapy	X	✓	<ul style="list-style-type: none"> • Safe to use in combination with other medications • Only management strategy that induces change in the immune response • Biologic compound
			<ul style="list-style-type: none"> • Slow onset of action (months to 1 yr) • Requires intradermal or serum allergy testing
Cyclosporine	X	✓	<ul style="list-style-type: none"> • Does not interfere with intradermal allergy testing
			<ul style="list-style-type: none"> • Slow onset of action (weeks) • Side effects common (gastrointestinal, hirsutism, gingival hyperplasia, papilloma) • Requires periodic monitoring of hepatic enzymes and blood cell counts
EFA s	X	✓	<ul style="list-style-type: none"> • May have steroid-sparing benefits
			<ul style="list-style-type: none"> • Slow onset of action (weeks to months)
Antihistamines	X	✓	<ul style="list-style-type: none"> • Side effects uncommon
			<ul style="list-style-type: none"> • Questionable efficacy—may only be effective in mildly pruritic animals

EFA, essential fatty acids.

TABLE 3**Oral Antihistamine Doses for Dogs**

Drug Name	Dose
Hydroxyzine	2 mg/kg q 12 hr ¹
Cetirizine	1–2 mg/kg q 24 hr ¹
Chlorpheniramine	0.4 mg/kg q 12 hr ²
Cyproheptadine	0.3–2 mg/kg q 12 hr ²
Clemastine	0.05–1 mg/kg q 12 hr ²
Loratadine	1 mg/kg q 12 hr ²
Fexofenadine	5–15 mg/kg q 24 hr ³
Amitriptyline	1–2 mg/kg q 12 hr ²
Diphenhydramine	2–3 mg/kg q 12 hr ² Questionable efficacy if given orally ⁴

- 1 Bizikova P, Papich MG, Olivry T. Hydroxyzine and cetirizine pharmacokinetics and pharmacodynamics after oral and intravenous administration of hydroxyzine to healthy dogs. *Vet Dermatol.* 2008;19:348–57.
- 2 Miller WH, Griffin GE, Campbell KL. *Muller & Kirk's Small Animal Dermatology.* 7th ed. St. Louis:Elsevier;2013.
- 3 Plevnik A, Kobal S, Domanjko-Petric A, et al. The efficacy of antihistamine fexofenadine versus methylprednisolone in the treatment of atopic dermatitis in dogs. *Slov Vet Res.* 2009;46:5–12.
- 4 Banovic F, Denley T, Blubaugh A, et al. Effect of diphenhydramine and cetirizine on immediate and late-phase cutaneous allergic reactions in healthy dogs: a randomized, double-blinded crossover study. *Vet Dermatol.* 2020;31:256–e58.

Considerations in Treating Secondary Infections

When superficial bacterial folliculitis (SBF) is identified, there are three guidelines to follow: **correct antibiotic, correct dose, and correct duration.**⁴ Table 4 provides a tiered approach to appropriate antibiotic choices including recommended doses for managing SBF. The golden rule for duration of antibiotic therapy is 7 days past clinical and cytologic resolution.²⁶ As such, the current recommended course for oral antibiotics in treating SBF is typically 21 days.

Topical therapy is an integral part of managing SBF, and many infections will resolve with topical therapy alone.^{27,28} As this requires advanced client compliance, prescribing more user-friendly formulations (spot-ons, sprays, or mousses) may encourage more effective usage. Topical antimicrobial therapy also acts as an excellent adjunctive therapy to oral antibiotics.

TABLE 4**Antimicrobials for Skin Infections in Dogs^{1*}**

First-tier empiric antimicrobials	
Clindamycin	5.5–11 mg/kg PO q 12 hr
Cephalexin	22–30 mg/kg PO q 12 hr
Amoxicillin clavulanate	14–25 mg/kg PO q 12 hr
Trimethoprim-sulfadiazine/ sulfamethoxazole	15–30 mg/kg PO q 12 hr
First OR second tier	
Cefpodoxime	5–10 mg/kg PO q 24 hr
Cefovecin	8 mg/kg SC q 14 days
Second tier ONLY with culture and susceptibility	
Minocycline	5–10 mg/kg PO q 12 hr
Doxycycline	5–10 mg/kg PO q 12 hr
Enrofloxacin	5–20 mg/kg PO q 24 hr
Marbofloxacin	2.75–5.5 mg/kg PO q 24 hr
Pradofloxacin	3 mg/kg PO q 24 hr
Chloramphenicol	40–50 mg/kg PO q 8 hr
Rifampin	3–6 mg/kg PO q 24 hr ²
Do NOT use for <i>Staphylococcus</i> spp. infections	
Amoxicillin	
Penicillin	
Nitrofurantoin	

PO, orally; SC, subcutaneously.

*For more information on antimicrobial stewardship, see the 2022 AAAP/AAHA Antimicrobial Stewardship Guidelines at aaha.org/antimicrobials.

- 1 Hillier A, Lloyd DH, Weese JS, et al. Guidelines for the diagnosis and antimicrobial therapy of canine superficial bacterial folliculitis (Antimicrobial Guidelines Working Group of the International Society for Companion Animal Infectious Diseases). *Vet Dermatol.* 2014;25:163–e43.
- 2 Harbour L, Schick A, Mount R, White A. Rifampicin treatment of canine multidrug-resistant methicillin-resistant staphylococcal pyoderma: A retrospective study of 51 cases. *Vet Dermatol.* 2022;33(5):384–91.

TABLE 5**Oral Antifungal Medication Doses for Dogs**

Drug Name	Dose
Ketoconazole	5–10 mg/kg q 24 hr
Fluconazole	5–10 mg/kg q 24 hr
Itraconazole	5 mg/kg q 24 hr
Terbinafine	30–40 mg/kg q 24 hr

1 Miller WH, Griffin GE, Campbell KL. *Muller & Kirk's Small Animal Dermatology*. 7th ed. St. Louis:Elsevier;2013.

2 Plumb DC. *Plumb's Veterinary Drug Handbook*. 9th ed. Wiley-Blackwell;2018.

Malassezia dermatitis is a common flare factor and may dramatically increase pruritus in atopic dogs. In many cases, appropriate treatment for *Malassezia* significantly increases the effectiveness of antipruritic/anti-inflammatory therapy. Topical treatment for *Malassezia* may be useful, however, some cases of deep or chronic *Malassezia* dermatitis (such as *Malassezia* in the claw folds or in severely lichenified skin) necessitate oral antifungal therapy with ketoconazole, fluconazole, itraconazole, or terbinafine (Table 5). The golden rule of 7 days past clinical and cytologic resolution applies here, too.

Section 3: Diagnosing the Feline Patient

Top 3 Takeaways:

1. Cats, unlike dogs, have a more varied clinical presentation of allergic dermatitis, including scratching, overgrooming, and several cutaneous inflammatory reaction patterns.
2. Treating all pruritic cats for fleas/mites is not only a potentially important therapeutic measure but also a key diagnostic step on the path to determining the primary cause of pruritus.
3. There are no accurate allergy tests for diagnosing feline atopic skin syndrome (environmental allergies) in cats. This diagnosis is determined through diligently ruling out all other causes of pruritus.

Overview

Compared with dogs, the pathogenesis of skin diseases in cats is not as well understood. Recently, there has been a resurgence in investigation for this species and attempts to clarify and classify the feline allergic profile.

Feline atopic syndrome has been proposed as the umbrella nomenclature describing allergic dermatitis involving environmental allergens, food allergy (gastrointestinal manifestation), and allergic

asthmas (respiratory disease) often associated with immunoglobulin E antibodies. Feline atopic skin syndrome (FASS) refers to the entity associated with inflammatory and pruritic allergic skin disease from environmental allergens.²⁹

Presentation of the Feline Patient

Four distinct clinical patterns of allergic dermatitis have been described in the cat: miliary dermatitis, head and neck pruritus, self-induced alopecia, and eosinophilic granuloma complex (eosinophilic plaques, granulomas, and indolent ulcers) (see Figure 5). Pruritus, from mild to severe, is typically present in cats with allergic dermatitis, whether due to food allergy, flea allergy, and/or FASS (environmental allergies). Exceptions include indolent ulcers or eosinophilic granulomas, which can occur without pruritus.³⁰

None of the feline cutaneous reaction patterns are pathognomonic for any particular pruritic disease, emphasizing the need to perform a thorough diagnostic workup,³¹ including an accurate clinical history, dermatologic physical examination, and a minimum dermatologic database. Atypical or non-treatment-responsive lesions may require a skin biopsy for definitive diagnosis.

Step One: Clinical History and Dermatologic Physical Examination

Clinical History

When inquiring about the presence and intensity of pruritus in the cat, it is important to educate the client that feline pruritus can manifest as scratching (head, neck, ears) with the hind paws and/or overgrooming (licking/biting/chewing) of specific areas such as the ventral abdomen, lumbar region, tail, and along the front and hind limbs. In addition, clients should know that some cats are “closet groomers” and may engage in overgrooming when clients are not directly supervising them. A trichogram demonstrating sharply broken hair shafts is an excellent way to confirm self-trauma as the cause of hair loss. A validated scoring method for pruritus has been published recently for cats,³⁰ which provides the client with detailed direction on ranking both scratching and licking behaviors by marking responses along a series of descriptions. This should be used at the initial appointment and then at each subsequent appointment after starting ectoparasite treatment, an elimination diet trial, courses of glucocorticoids, or long-term therapies for FASS (i.e., allergy immunotherapy or cyclosporine).



Having technicians take the history is an excellent way for them to build client trust and relationships that can carry through treatment follow-ups, client education, and ongoing control measures.



Miliary Dermatitis

Miliary dermatitis appears as small papules with overlying yellow to brown crusts which can appear on the dorsal aspects of the body and the face. Often, these lesions may only be palpable rather than visible if not much alopecia is occurring.

Self-Induced Alopecia



Self-induced alopecia can occur without visible inflammation. Commonly affected areas include medial aspects of forelimbs and thighs, ventral abdomen and inguinal regions, dorsal lumbar area and base of tail.

Head and Neck Pruritus



Head and neck pruritus lesions can appear as alopecia, miliary dermatitis, and erythema with excoriations (scratch marks); however, many cats will exhibit intense pruritus that induces erosions, ulcerations, crusting, and hemorrhage.

Photos courtesy of Andrew Simpson, DVM, MS, DACVD

FIGURE 5

Clinical Presentation of the Pruritic Feline Patient.

Eosinophilic Granuloma Complex (EGC)

EGC lesions can be variable in presentation and can appear as indolent ulcers (unilateral or bilateral ulcerations of the upper lip), eosinophilic granulomas (areas of dermal thickening with or without erosion/ulceration on caudal thighs, proliferative lesions on the tongue or hard palate, or chin swelling “fat chin”), and eosinophilic plaques (raised areas of erosions and ulcerations present on ventral abdomen and medial thighs).

Indolent Ulcer



Bilateral ulceration and deformation of the rostral lip margins due to indolent ulcer.



Unilateral ulceration on the rostral lip margin due to indolent ulcer.

Eosinophilic Plaque



Pruritic eosinophilic plaques on the ventral abdomen of two different cats with feline atopic skin syndrome characterized by multifocal to coalescing raised areas of erythema, erosions, exudate, and alopecia.

Eosinophilic Granuloma



Focal, ulcerative oral mass (eosinophilic granuloma) on the left palatoglossal arch in a cat.



Focal, well-demarcated thickening of the ventral chin (“fat chin”) due to eosinophilic granuloma in a cat with feline atopic skin syndrome.



Swelling, erythema, and crusting of the metacarpal pad with biopsy-confirmed eosinophilic granuloma in a cat with food allergies.



Linear granulomas (raised, erythematous, linear dermal thickenings) on the caudal aspect of the thighs of a cat with allergic dermatitis.



Raised, nodular lesions with exudate and alopecia representative of eosinophilic granuloma on the rear paw and claw folds and rear leg of two different cats with allergic dermatitis.

Photos courtesy of Andrew Simpson, DVM, MS, DACVD

FIGURE 5

Continued.

Key Clinical History Questions

1. At what age did the pruritus start?
2. Is it seasonal?
3. Are other cats or dogs in the house itchy?
4. How much time is spent indoors versus outdoors?
5. Was the cat recently housed in a shelter/cattery/boarding facility?
6. Has there been any exposure to new or stray cats?
7. How often is ectoparasite control applied?
8. Has there been a response to other treatments, including antibiotics or antipruritic medications?
9. What previous diagnostic tests have been performed?

Dermatologic Physical Examination

Evaluation should include the most commonly affected areas including the head, neck, and ventral abdomen; however, any area of haired skin could potentially be involved, such as along the dorsum, sternum, axillae, medial thighs, forelimbs/hindlimbs, paws, perineum, and tail.³¹ The oral cavity should be examined to look for granulomas of the tongue/palate and indolent ulcers of the upper lip. Flea combing is a crucial part of the examination to identify live fleas and/or flea dirt to support a diagnosis of a flea infestation or allergy.

Otitis externa can occur in 20% of cats with feline atopic skin syndrome,^{31,32} but it can also occur in cats with food allergy. Evaluation of the pinnae and otoscopic examination of the ear canals is an integral part of the complete dermatologic examination.

Step Two: Minimum Dermatologic Database

The minimum dermatologic database should be collected based on reaction patterns (Figure 6).

- **Cytology of skin and ear (if evidence of ear disease is present).** Superficial bacterial skin infections and *Malassezia* infections can be present with all cutaneous reaction patterns, and thus, all skin lesions on the cat should be sampled for secondary infection, placing this diagnostic higher on the priority list. The exception to this rule would be self-induced alopecia without overt evidence of cutaneous inflammation, as alopecia alone is not as likely to harbor infection.
- **Superficial and deep skin scrapings.** Ideal in all cases of pruritic skin disease in cats to potentially provide a definitive diagnosis. When broad-spectrum ectoparasitocides are used (i.e., isoxazolines), keep in mind that treatment failures could still occur.
- **± DTM culture.** Considering that pruritus is typically minimal to absent in most cases of dermatophytosis,³³ performing a fungal culture (DTM) and/or dermatophyte polymerase chain reaction test may not be necessary in all cases of cats with cutaneous reaction patterns. This reflects the majority opinion of the guidelines task force; however, not all members agreed on the overall ranking of screening for dermatophytosis. One task force member felt that although dermatophytosis is not typically pruritic (or at least not severely), it should be ranked higher on the differential list because of its likelihood of occurrence. Consideration of dermatophytosis may rank higher on the differential list under certain circumstances, including indoor/outdoor cats, recently adopted

kittens, older immunocompromised cats, and Persians and other long-haired felines. In some cases, such as miliary dermatitis and self-induced alopecia, DTM ± dermatophyte polymerase chain reaction test may be more highly considered if parasites have been ruled out.



Skin scrapings and otic preparations for mites could be prioritized lower on the list with cost-concerned clients, as pruritic mites are already likely being treated if isoxazolines have been prescribed.

Step Three: Treat Pruritus During the Diagnostic Period

Many itchy cats require glucocorticoids because of their rapid and reliable benefits for immediate treatment, especially when moderate to severe pruritus and/or inflammatory lesions are present.³⁴ Antihistamines are not as reliable at controlling itch³⁵ and do not have enough anti-inflammatory properties to reduce severely inflamed lesions. Cyclosporine, although effective for long-term treatment, does not typically provide immediate relief from pruritus.

It is recommended to consider oral glucocorticoids (prednisolone 2 mg/kg/day, methylprednisolone 0.8–1.5 mg/kg/day,³⁴ or dexamethasone 0.2 mg/kg/day²⁶ tapered over a 3 wk period) rather than injectable repositol glucocorticoids, given the inability to rapidly withdraw the medication in the event of side effects (e.g., congestive heart failure, diabetes, and skin fragility).

Step Four: Treat Ectoparasites and Secondary Infections

Ectoparasite Treatment

It is essential to rule out external parasites (i.e., fleas and mites) in all cases of feline pruritus with reliable parasite control measures. Discussion of all available flea treatment products is beyond the scope of these guidelines; however, the guidelines task force generally recommends the use of isoxazolines (fluralaner, sarolaner, and lotilaner) owing to their relatively rapid flea adulticidal properties in addition to off-label broad-spectrum ectoparasite coverage (i.e., *Demodex cati*, *Demodex gatoi*, and *Otodectes*).^{36–38}

When reviewing the known or suspected clinical picture with clients, it is important to discuss therapy durations. Be candid that treating mites takes 6–8 wk on average, whereas a flea infestation takes closer to 3 mo to treat under ideal conditions. Openly discussing client constraints (e.g., time, ability to comply, and finances) in initial appointments will inform treatment choices and expectations for the veterinary team and clients.

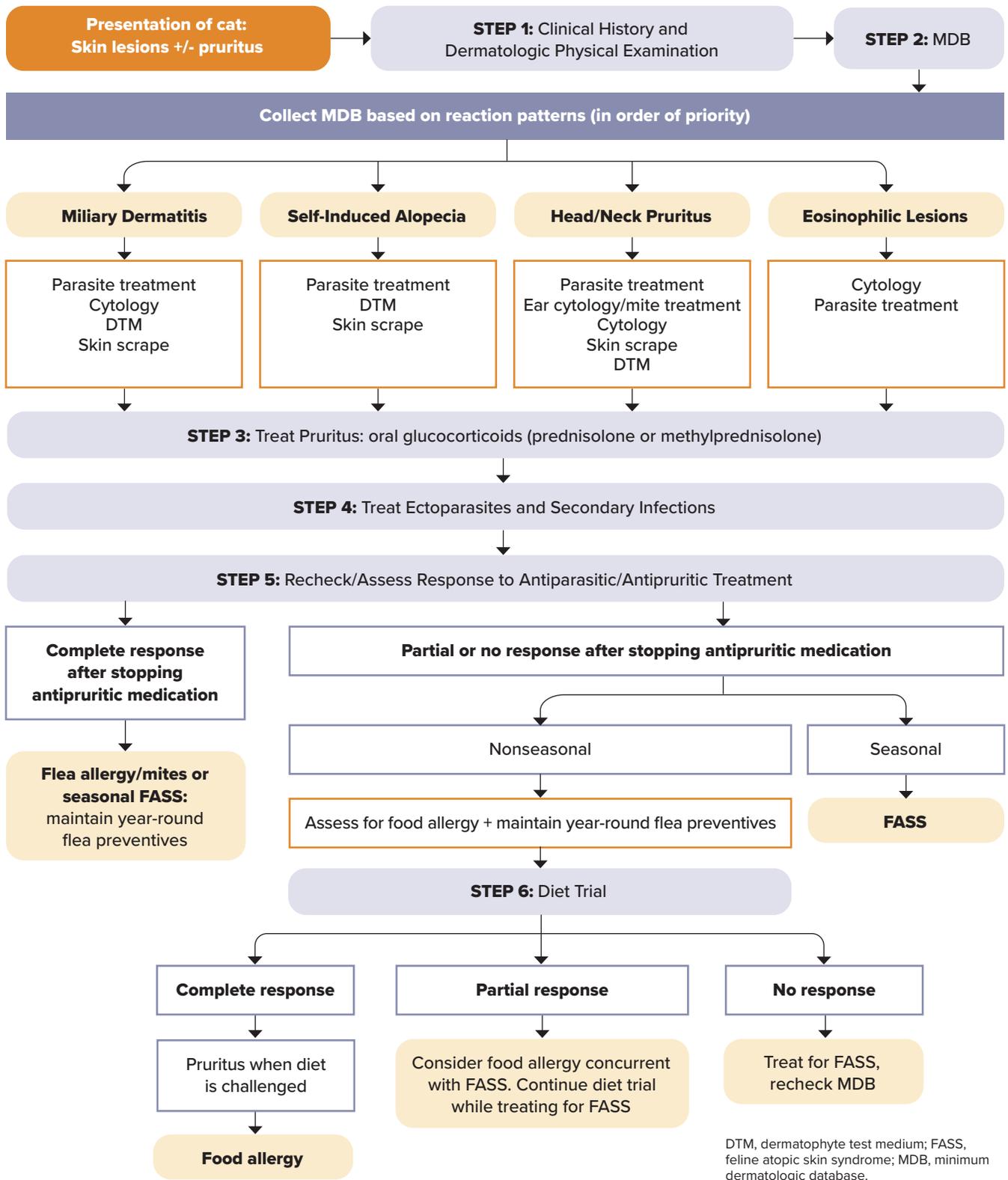


FIGURE 6
Diagnosing Allergic Skin Disease in the Feline Patient.

Treat Secondary Infections

Superficial skin cytology is the diagnostic method of choice to identify the presence of secondary infection with either bacteria or *Malassezia* and can be performed using a microscope slide (for a direct impression smear of exudative lesions) and acetate tape (for scaling, crusting, and erythema).

Treatment for bacterial infection (amoxicillin-clavulanic acid 12.5–20 mg/kg orally twice daily; clindamycin 11–33 mg/kg orally once daily; cefovecin 8 mg/kg subcutaneously) should be based on the presence of degenerate neutrophils with cocci-shaped bacteria.³⁹ Bacterial culture and susceptibility testing may be needed in more complicated cases involving rod-shaped bacteria. Finding more than one *Malassezia* per high-power field suggests yeast overgrowth⁴⁰ and may warrant systemic therapy.⁴¹ For *Malassezia* dermatitis, itraconazole, fluconazole, or terbinafine should be selected (Table 9). Ketoconazole may cause severe hepatotoxicity in cats.⁴²

Although topical antimicrobial therapies are ideal to reduce the overall exposure to systemic antibiotics, the grooming behavior of cats and their decreased tolerance for topical applications often limits their use.



If diagnostics cannot be performed because of client financial constraints, then it would be most advantageous to use a broad-spectrum external parasite treatment in addition to a tapering course of oral glucocorticoids.

Step Five: Recheck, Assess Response to Antiparasitic/Antipruritic Therapy

In flea-endemic areas, consistent flea prevention should be continued in all cats year-round regardless of their flea history to reduce the possible burden of flea allergy leading to worsening dermatitis and



Superficial bacterial skin infection due to Staphylococcus spp. on the lateral neck of a cat. Note the alopecia, exudate, crusting, erythema, and erosions.

Credit: Photo courtesy of Andrew Simpson, DVM, MS, DACVD

pruritus. If there is no improvement or only partial improvement of pruritus and clinical lesions after ectoparasiticide treatment and addressing secondary infections, then other causes of pruritus should be investigated. A skin biopsy is recommended in cases with atypical lesions to rule out other pruritic dermatoses (e.g., pemphigus foliaceus), especially in cases of crusting dermatitis without cytologic evidence of bacterial or yeast. With nonseasonal pruritus, a restrictive diet trial should be pursued to rule out food allergies.

Step Six: Diet Trial

Food allergies in cats can only be diagnosed with an elimination diet trial, by feeding either a hydrolyzed or a novel protein diet.^{43–45} Definitive diagnosis is ultimately confirmed if the pruritus and/or skin lesions return after challenging the cat with the previous diet and then resolve again once returning to the restrictive diet. It is recommended to conduct the elimination diet trial for 8 wk, as 90% of food-allergic cats resolve their clinical signs by this time point, whereas 50% of feline food-allergic cases resolve at 4 wk.⁴⁶



Use of OTC diets should not be recommended when conducting a diet trial in cats. Ingredients not declared on the label (e.g., chicken) have been detected in up to 82% of OTC feline diets,^{47,48} possibly negating the results of the trial. However, the guidelines task force agrees that an OTC novel protein diet can be used if financial constraints make other diets impossible. The client should be warned that an OTC diet may not provide optimal results and should be considered a diet change, not a true diet trial.

Systemic glucocorticoids can be withdrawn at the 3 wk point of a diet trial and/or parasite treatment trial and again at the 6 wk point to assess response to diet alone.

Feline Atopic Skin Syndrome Diagnosis

FASS can only be diagnosed based on compatible history and clinical signs and by ruling out all other diseases that can look similar to this disease (i.e., flea allergy, food allergy, external parasites, bacterial skin infection, and dermatophytosis). Up to 25–30% of cats with FASS will exhibit seasonal patterns,³² which supports a diagnosis of environmental allergies without the need for an elimination diet trial, if external parasites and secondary skin infections have been treated and/or ruled out. Otherwise, lack of response to a restrictive diet trial would indicate FASS in the nonseasonal pruritic cat.



Once a diagnosis of FASS has been achieved by process of elimination, intradermal or serum allergy testing by a veterinary dermatologist is then a useful tool to identify which specific environmental allergens should be included in allergy immunotherapy.

TABLE 6**Antipruritic and Anti-inflammatory Medications for Cats**

Drug Name	Cyclosporine ¹	Glucocorticoids ²
Mode of action	Calcineurin inhibitor that modulates T-cell function	Influences gene expression of proinflammatory cytokines
Administration	PO q 24 hr	PO Injectable not recommended
Time to onset	4–6 wk	Hours
Age	>6 mo	Any
Weight	>1.4 kg	Any
Health restrictions	History of neoplasia Renal insufficiency	Congestive heart failure Diabetes mellitus Hyperadrenocorticism Hypertension
Adverse reactions	Vomiting Diarrhea Gingival hyperplasia Hypersalivation Lethargy Drug interactions	Polyuria/polydipsia Polyphagia Diabetes mellitus Obesity Muscle wasting Iatrogenic hyperadrenocorticism Congestive heart failure

PO, orally; SC, subcutaneously.

1 Atopica for Cats (cyclosporine oral solution). Package insert. Elanco.

2 Plumb DC. *Plumb's Veterinary Drug Handbook*. 9th ed. Wiley-Blackwell;2018.

Note: Oclacitinib is not labeled for use in cats. Lokivetmab is contraindicated in cats.

Section 4: Managing Feline Chronic Allergic Conditions

Top 3 Takeaways:

1. Ectoparasites and infections need to be ruled in/out and addressed before treating allergic skin disease in cats.
2. Flea allergy dermatitis is the most common allergic skin disease; diligent adulticidal flea prevention is key in any pruritic feline patient as this can be a complicating concurrent factor.
3. FASS has different management considerations compared with canine atopic dermatitis; partnership with a veterinary dermatologist can be beneficial for these patients.

Overview

Identifying the cause(s) of an allergic condition can be a long, often frustrating process of trial and error for both clients and veterinary staff. Although ultimately discovering the source brings relief, this is

actually just the beginning of another stage that will last the cat's lifetime—that of managing a chronic condition. Before launching into what will be required next, however, pausing to congratulate the client for seeing the diagnosis process through speaks volumes about a practice's compassion and desire to cultivate long-lasting relationships.

Treating Flea Allergy

Flea allergy dermatitis is the most common allergic skin disease, seen solely or concurrently with other allergic conditions. Diligent adulticidal flea prevention must continue long term and consists of the following considerations:

1. Use FDA-approved products for cats.
2. Recommend isoxazoline medications for broad coverage (fluralaner, sarolaner, lotilaner, ± selamectin or moxidectin).
3. Treat for the proper duration and response for fleas versus mites.

4. If there are multiple cats or the client has difficulty medicating, consider imidacloprid/flumethrin collars.
5. Ensure other animals are treated and on year-round prevention as well.
6. Consider environmental treatment.
7. Educate clients on the life cycle of fleas, including the time it takes to see treatment response.
8. Symptomatic antipruritic therapy:
 - Prednisolone 2 mg/kg/day *per os* (PO) tapered over 3 wk
 - Methylprednisolone 0.8–1.5 mg/kg/day PO tapered over 3 wk
 - Dexamethasone 0.2 mg/kg/day PO tapered over 3 wk



Technicians can discuss treatment of other pets in the households, explain parasite life cycles, and reinforce the importance of year-round prevention with clients.

Treating Food Allergy

Food allergy (at least anecdotally) seems to be more common in cats than dogs. For cats, palatability of a diet and securing the preferred formulation (e.g., dry only versus wet) are important considerations, especially if the patient is a picky eater. Ideally, a prescription veterinary diet should be fed long term with either a novel protein diet (e.g., rabbit, kangaroo, or alligator) or a hydrolyzed diet (hydrolyzed soy, hydrolyzed fish, or hydrolyzed poultry feather). If a specific allergen is identified, an OTC diet that does not contain this allergen may be an effective choice for long-term management. Once an appropriate diet has been identified, clients must stick to the regimen and understand this will be a commitment for the rest of the cat's life.

During client education, technicians or members of the veterinary team should advise clients to plan for possible shortages or backorders of special diets. Keeping extra bags or cans of food on hand is one strategy. Considering different brands with similar or identical ingredients is another. Choosing a home-cooked diet in consultation with a veterinary nutritionist is a third strategy, but it should be done with extreme caution to account for the specific nutritional needs of cats.

Treating Feline Atopic Skin Syndrome

A diagnosis of FASS is an excellent juncture in treatment to consider referral to a veterinary dermatologist if this has not occurred already. Finding the proper therapeutic regimen for a feline patient and client can be challenging, and “tinkering” with options that do not provide sufficient improvement tends to lead to client frustration and potential loss of trust.⁴⁹ Even for clients with cost concerns, a veterinary dermatologist can provide more targeted treatment to bring the patient relief. Moreover, there may be time and cost savings in the long run with more targeted treatments.

If referral is not possible or desired, establishing a baseline level of pruritus at this point is helpful to assess response to various

therapeutic interventions. Because glucocorticoids tend to provide relief for most allergic cats, they should be considered as a first test intervention to determine the degree of improvement. If FASS is seasonal, they may be an option for continued management.

Once pruritus surpasses 6 out of 12 mo in a given year, alternative options should be discussed with the clients (see Table 7).

Cyclosporine is a labeled treatment for feline allergy and comes in liquid form; however, its palatability is questionable, and many owners struggle with administration. It takes time to reach therapeutic levels (4–6 wk), but at that point, most cats can have the frequency decreased to every other day (or possibly less). This should **not** be recommended for cats that go outside owing to the increased risk of infectious disease exposure that may be fatal on this medication (e.g., toxoplasmosis). Cats on this medication should be fed a cooked diet and maintained on effective internal and external parasite control measures.

Oclacitinib is not labeled for cats and has not been thoroughly assessed in this species with regard to long-term safety and dosing. The task force does not recommend the use of oclacitinib in cats at this time.

Lokivetmab should not be used in cats; this caninized monoclonal antibody can potentially be fatal if administered to a non-dog species.

Immunotherapy can be an excellent option for cats with FASS as this species tends to respond more favorably than not.³⁵ Keep in mind that allergy tests, both serum and intradermal, do not diagnose allergy but rather support the clinical diagnosis and aid in immunotherapy formulation; they should not be used as “allergic or not” diagnostics, as they can be positive in animals with no clinical signs of allergy. Both injectable and sublingual immunotherapy may be considered depending on client and patient preference. Most owners elect injections first due to ease of administration, but the oral option is also effective in cats.



Opting for immunotherapy is another treatment juncture where veterinary dermatologists may be more adept at the intricacies of testing, formulations, and making appropriate adjustments.

Alternative or adjunct therapies to consider in the allergic feline include the following:

- **Antihistamines.** Can be helpful in cats with concurrent upper respiratory manifestation of allergy, but they do not provide much pruritus relief (Table 8).
- **Nutraceuticals** (e.g., ultra-micronized palmitoylethanolamide and essential fatty acids). These can be administered separately as supplements, or some clients may appreciate the benefit from a “skin support” diet that includes these ingredients as opposed to another oral therapy.
- **Topical skin barrier support** (e.g., fatty acid/essential oil spot-on formulations). The benefits of these interventions to allergic cats are somewhat uncertain owing to the lack of information supporting the impact of barrier dysfunction in feline allergy. They may at least

TABLE 7**Acute Flare and Long-term Management Therapies in Cats**

Drug Name	Acute Flare	Long-term Management	Advantage/Disadvantage
Corticosteroids	✓	✓	<ul style="list-style-type: none"> • Rapid onset of action • Side effects common
Cyclosporine	✗	✓	<ul style="list-style-type: none"> • Does not interfere with intradermal allergy testing • Slow onset of action (weeks) • Side effects common (gastrointestinal, hypersalivation, lethargy, gingival hyperplasia) • Requires periodic monitoring of hepatic enzymes and blood cell counts
Allergen-specific immunotherapy	✗	✓	<ul style="list-style-type: none"> • Safe to use in combination with other medications • Only management strategy that induces change in the immune response • Biologic compound • Slow onset of action (months to 1 yr) • Requires intradermal or serum allergy testing
EFA s	✗	✓	<ul style="list-style-type: none"> • May have steroid-sparing benefits • Slow onset of action (weeks to months)
Antihistamines	✗	✓	<ul style="list-style-type: none"> • Side effects uncommon • Questionable efficacy—may only be effective in mildly pruritic animals

EFA, essential fatty acids.

Note: Oclacitinib is not labeled for use in cats. Lokivetmab is contraindicated in cats.

be good options for mildly affected cats or as adjunct therapy to reduce other medication requirements.

Treating Flares

As with dogs, even the best-managed allergic cat can experience episodes of pruritic flare. It is imperative to reassess the presence of ectoparasites and secondary bacterial and yeast infections in this situation, as these remain common complications in the face of allergy. Additionally, remind owners that treatment does not just stop working once it has been determined to be beneficial; rather, the cat may need a bit of extra support during these episodes.

To provide antipruritic and anti-inflammatory benefit during acute flares, a tapering course of systemic glucocorticoids should be

considered, such as prednisolone (2 mg/kg PO q 24 hr), methylprednisolone (0.8–1.5 mg/kg PO q 24 hr), or dexamethasone (0.2 mg/kg PO q 24 hr). In addition, in cases in which cats have been receiving lower-dose cyclosporine (i.e., every-other-day dosing or twice-weekly dosing), a temporary increase to once-daily dosing can be recommended for 3–4 wk.

Section 5: Otitis Externa

Top 3 Takeaways:

1. Recurrent otitis externa is commonly caused by underlying allergic disease, and in some patients, it may be the only clinical manifestation of allergy.
2. Cytology should be performed in every case of otitis externa.
3. The goal of short-term treatment is to reduce inflammation and treat secondary infection (where present), while long-term management aims to control inflammation and maintain ear health.

TABLE 8**Oral Antihistamine Doses for Cats**

Drug Name	Dose
Hydroxyzine	5–10 mg/cat (NOT mg/kg) q 12 hr ¹
Cetirizine	5–10 mg/cat (NOT mg/kg) q 24 hr ²
Chlorpheniramine	2–4 mg/cat (NOT mg/kg) q 12 hr ²
Cyproheptadine	2 mg/cat (NOT mg/kg) q 12 hr ²
Clemastine	0.68 mg/cat (NOT mg/kg) q 12 hr ²
Loratadine	2.5–5 mg/cat (NOT mg/kg) PO q 24 hr ¹
Fexofenadine	30–60 mg/cat (NOT mg/kg) PO q 24 hr ³
Amitriptyline	2.5–7.5 mg/cat PO (NOT mg/kg) q 12 hr ¹
Diphenhydramine	2–3 mg/kg q 12 hr ²

- 1 Plumb DC. *Plumb's Veterinary Drug Handbook*. 9th ed. Wiley-Blackwell;2018.
- 2 Miller WH, Griffin GE, Campbell KL. *Muller & Kirk's Small Animal Dermatology*. 7th ed. St. Louis:Elsevier;2013.
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TABLE 9**Oral Antifungal Medication Doses for Cats^{1,2}**

Drug Name	Dose
Ketoconazole	Contraindicated—causes severe hepatotoxicity ²
Fluconazole	5–10 mg/kg q 24 hr
Itraconazole	5 mg/kg q 24 hr
Terbinafine	30–40 mg/kg q 24 hr

- 1 Miller WH, Griffin GE, Campbell KL. *Muller & Kirk's Small Animal Dermatology*. 7th ed. St. Louis:Elsevier;2013.
- 2 Plumb DC. *Plumb's Veterinary Drug Handbook*. 9th ed. Wiley-Blackwell;2018.

Overview

Allergic otitis externa (AOE) is a common manifestation of allergy in animals and in some cases is the only clinical sign. AOE is an inflammatory condition of the ear and should not be confused with infection—which commonly occurs secondary to AOE. Although it is important to identify and treat secondary infections, identification of the primary (underlying) cause of otitis externa is critical to the prevention of recurrent otitis. More than half of dogs and ~20% of cats with allergies have AOE.^{50–52} Other primary causes of otitis externa include parasites, foreign body, neoplasia, endocrinopathy, and keratinization disorders and should be ruled out in every case.^{26,51} AOE occurs frequently in patients with atopic dermatitis and food allergy but is not a feature of flea allergy dermatitis.

Clinical Presentation

Most cases of AOE present as bilateral ear disease—although disease severity may differ between ears. Otic pruritus manifests as head shaking, scratching at the ears, and rubbing the face/head. Clinical signs of AOE include pruritus, pain, erythema, ceruminous (waxy) exudate, periauricular alopecia, and excoriation. When secondary infection is present, otic exudate (\pm malodorous), crusting/scaling,

erosions, and asymmetric ear carriage may also occur. Otitis media/interna should be suspected in animals presenting with hearing loss, head tilt, vestibular disturbances, Horner's syndrome, and/or temporomandibular joint pain.

Diagnosis

The importance of a thorough evaluation of the ears in any patient presenting with dermatologic disease cannot be overemphasized. This includes examination of the periauricular region and pinna, palpation of the canals, and otoscopic examination. Pliability of the cartilaginous structures of the ear canals provide clues to pathologic changes that can result from chronic inflammation, which can ultimately lead to calcification. Otoscopy not only is important for examination of deeper ear structures but also helps to rule out most other primary causes of otitis externa. Chronic inflammation can lead to ceruminous gland hyperplasia within the ear canals causing a cobblestone-like appearance.⁵¹ Stenosis of the ear canals occurs because of edema and inflammation and/or pathologic changes to the ear over time.

Secondary infection is common in animals with AOE. Alterations of the skin's natural flora have been demonstrated in dogs with

atopic dermatitis, and a similar dysbiosis has also been observed within the ear canals of atopic dogs having increased amounts of *Staphylococcus* spp. relative to normal dogs.⁵³ Inflammation causes changes to the ear canal microenvironment, altering the bacterial population and creating an ideal environment for yeast (*Malassezia* spp.) overgrowth.⁵¹ Therefore, it is imperative that ear cytology be performed in every case of AOE. Diagnostic evaluation should include both a stained, dry-mounted sample to assess for microbial infection and an unstained, mineral oil wet mount to rule out otic ectoparasites. This is of particular importance in cats because of the prevalence of *Otodectes* in this species.



Training technicians to obtain and interpret ear cytology facilitates increased efficiency when seeing appointments.

Treatment

Topical therapy should always be guided by cytologic findings. In cases with abundant exudate, an in-clinic ear flush should be performed to aid in the removal of exudate and facilitate a more thorough otoscopic examination. Caution should be exercised in cases of a ruptured tympanic membrane, with careful selection of antimicrobial agents and cleaning solutions that are safe for use in the middle ear. Discussion of specific products and ingredients is beyond the scope of these guidelines.



In difficult cases of otitis externa in which the patient has failed numerous treatment protocols and/or there is no resolution after 3–6 mo of treatment, collaborative care with a board-certified dermatologist is recommended as this has been shown to significantly improve resolution of chronic otitis with infection.⁵⁴

Treatment recommendations for secondary infections in AOE are beyond the scope of these guidelines.

Short-term and Long-term Management of AOE

The short-term goal of therapy is to reduce inflammation and treat secondary microbial infection (where present). Oral corticosteroids in a short, tapering course at anti-inflammatory doses or oclacitinib may be used for control of inflammation and pruritus. Corticosteroids applied topically are also effective.

The long-term goal of therapy focuses on control of inflammation and maintenance of ear health. Managing the underlying allergy is key to minimizing AOE. When crafting an allergy management plan in patients with AOE, one must be mindful that medications used to manage atopic dermatitis have varying efficacy against AOE and individual patient response must be assessed.

Routine, topical maintenance therapies are often very helpful in reducing the recurrence of AOE. Routine ear cleaning based on an individual patient's needs is useful to maintain a healthy microenvironment and remove debris and ceruminous material from the ear canals. Cleansing agents that promote epidermal barrier function are useful to reduce microbial adherence to the epithelium and should be considered in individuals prone to secondary infection. Topical glucocorticoids (e.g., hydrocortisone and dexamethasone) aid the management of inflammation in the ear canal and may help prevent allergic flares and secondary infections as well.



Referral is indicated if the patient has AOE that is complicated with secondary infection that is not responding to empiric treatment, if it involves a resistant organism, and/or if the patient has otitis media.⁵⁴



Demonstration of ear cleaning technique and topical medication application is vital to success and should be the responsibility of a veterinary technician. Veterinary technicians can also conduct interim follow-up with the client via telephone, text message, video chat, or email.

Section 6: Spectrum of Care Considerations in Managing Allergic Skin Diseases

Top 3 Takeaways:

1. Gather a thorough and relevant history and use pattern recognition and probabilistic clinical reasoning.
2. Recognize when diagnostics and referral are necessary.
3. Use efficient but effective client communication to manage client expectations.

Overview

Spectrum of care (SOC) is the practice of providing a continuum of acceptable care that considers available evidence-based medicine while remaining responsive to client expectations and financial limitations.⁵⁵ SOC considerations are highly relevant to allergic skin disease in dogs and cats because skin allergies, ear infections, and skin infections were in the top 10 medical conditions submitted for Nationwide pet insurance claims in 2021.⁵⁶

The key components of successfully practicing SOC are gathering a thorough and relevant history, using pattern recognition and probabilistic clinical reasoning, recognizing when diagnostics and referral are necessary, and communicating with clients efficiently but effectively to manage expectations.

Step One: Clinical History

During the history-taking process, it is critical to focus on previous diagnostics, response to therapies, seasonality, signalment, and realistic compliance from the client. Compliance can be affected not only by financial limitations but also by the level of ability to give medications

and administer topical therapies, perform strict diet trials, and/or have the time and access to return for recheck appointments. All of these factors are important to understand and balance when developing diagnostic and treatment plans.

Owing to the need for efficiency in general practice, having a specific dermatologic history form sent to clients ahead of time can be very helpful, as can training technical staff on proper history taking and client education. Also, consider an easily accessible area in your records for recording the history of treatment successes and failures to eliminate digging through previous records.

Step Two: Physical Examination

The practice of SOC relies heavily on pattern recognition and using a probabilistic clinical reasoning approach to determine the most likely diagnosis. This requires understanding common clinical presentations, as well as using therapy trials to confirm or deny a suspected diagnosis.

Training technicians on collection of samples for cytology, skin scrapings, flea combing, etc. can contribute to a more thorough and efficient appointment.

Step Three: Treatment

Communicating the pros and cons of all therapeutic options to clients before treatment choices are made is vital for clients to be able to make educated decisions. When developing a plan:

- Acknowledge that rising costs of many products to manage allergic disease, from oclacitinib to lokivetmab, immunotherapy, and prescription diets, continue to make allergic management financially challenging;
- Explain that using cost-effective therapies is at times necessary, including steroids, antihistamines, and/or limited-ingredient diets for SOC, but that the cat or dog is not getting substandard medicine;
- Consider adjustments of monitoring protocols for certain medications as an area of cost that may need to be discussed, too.

Recognizing treatment failures and/or poor medical management should trigger a change to a more standardized clinical approach if possible. This shift in clinical approach often must start with helping clients maintain realistic expectations and explaining why the need now is for diagnostics and/or more aggressive therapies. Continued conversations about SOC are essential for removing the substandard care stigma associated with meeting clients where they are.

Step Four: When to Refer

A significant part of financial considerations for managing both the short- and long-term costs associated with allergic skin disease is recognizing when early diagnostics or referral may have better clinical and financial outcomes. For example, early referral for chronic AOE to specialists resulted in improved clinical outcomes and reduced

recurrence.⁵⁴ Other considerations would be an early recommendation for referral to a specialist for suspected canine atopy in young patients who will require therapy for 5+ yr, versus waiting until the patients fail all medical management options offered in general practice. A survey performed by the American College of Veterinary Dermatologists revealed that 82% of clients would have felt better about their primary care veterinarian if they had been referred earlier. Seventy-three percent of clients reached a “tipping point of frustration” if they visited their primary care veterinarian more than three times for a dermatologic issue, and 15% of these clients stopped visiting their primary care veterinarian for their pets’ routine care as well.^{49,57}

Step Five: Using Telehealth

Because the management of allergic disease is so dependent on frequent communication, the use of telehealth technologies can cut costs and save both clients’ and veterinarians’ valuable time. Most practices are already using phone and email follow-ups. Photographs or videos sent from clients can be reviewed for progress in an asynchronous manner, allowing technicians to assist in the triage process. Video calling and communication platforms like FaceTime and Zoom can provide real-time visuals and conversations. It is important to remember, however, that many dermatologic conditions may be infectious in nature, and telehealth may have limited applications as it does not afford the opportunity to perform cytologic evaluations or otoscopic examination to detect occult cases of otitis externa. When using telehealth, it is important to follow all applicable laws and regulations regarding the establishment of a veterinarian-client-patient relationship when required. For information about state-level requirements, contact the state board of veterinary medicine.

The use of teleconsulting to bridge the gap between the client and a specialist is also an increasingly available option to improve access to specialty care. Teleconsulting can be useful when access to specialists is limited by distance, wait times, or finances as this modality allows access to a wider number of specialists.

To learn more about integrating telehealth options into veterinary practice, refer to the 2021 AAHA/AVMA *Telehealth Guidelines for Small-Animal Practice* at aaha.org/telehealth.

Section 7: Technician Utilization in Managing Allergic Skin Diseases

Top 3 Takeaways:

1. Empower technicians to do everything within state regulations that does not require a veterinary medical degree.
2. Spend time training technicians on how to conduct diagnostic tests and the best way to explain procedures and treatments to clients.

3. Allowing technicians to do more will enable the veterinarian to see more patients more efficiently.

Overview

Credentialed veterinary technicians play essential roles in clinics that strive for outstanding client service, quality patient care, and efficient workflow. The only limiting factors are state regulations and a veterinarian's willingness to train technicians to take over specific duties within defined parameters.

Many technicians want more responsibility commensurate with their training, and empowering them to assume additional job duties is a wise investment of time for veterinarians. For more information on the many and varied roles technicians can take to streamline practice and improve patient care, see the 2023 *AAHA Technician Utilization Guidelines* at aaha.org/technician-utilization.

Key Duties During the Examination

- Technicians are essential in many aspects of a veterinary dermatologic consultation, starting with a detailed dermatologic history, physical examination, and setting expectations.
- Technicians can collect, process, and interpret basic cytology. Training a technician on cytologic interpretation will take time, but once training is complete, the technician should be able to analyze slides very quickly. A single technician proficient in cytology can train the rest of the staff.
- Blood and urine can also be collected and processed by the technical staff.

Key Veterinary Technician Duties During Patient Discharge

- Discharge patients and review treatment plans with clients, including showing clients how to do treatments, such as ear cleanings or topical therapies, which greatly improves client compliance and therapy success rates.
- Double-check that medications have clear directions and are sent home with explanations.
- Emphasize to clients how multiple types of therapies work together to achieve results; therefore, all need to be part of the comprehensive plan.
- Remind clients to have realistic expectations when it comes to results. Most treatments do not work overnight, and it will take several weeks to see improvement. Technicians can help clients understand that they are beginning a long journey while reassuring them that they have the support of the veterinary team.

Being aware of state regulations is the responsibility of the credentialed technician and the management team, and all actions taken must fall within the scope of their license. The entire veterinary team should become familiar with the scope of practice for credentialed technicians in their state.

Essential Duties During Follow-up and Ongoing Treatment

Early interaction during appointments helps clients feel comfortable talking with technicians throughout follow-up and in instances in which the veterinarian is unavailable. Involving technicians in client education both in-clinic and once the patient leaves decreases the time the veterinarian spends on the phone or in the examination rooms.

Day-after calls to check on the patient(s) and ensure clients can complete all treatments as directed is one area where technicians can be involved. Phone follow-up is also beneficial at other times, such as 2–3 wk into a diet trial or 1 wk after starting anti-pruritic therapies. However, a caveat for risk management is that technicians must always document client discussions in the patient's medical records, and "spoke with client" is inadequate. Thorough summaries of client discussions help protect the technician's and veterinarian's licenses should anyone ever question what was said.

Practice Tip: Technicians can be involved in preparing short instructional videos that can be sent to clients or linked to the practice's website.

Resources to Assist in Training Technicians

Resources that can be valuable to the veterinary team include the following:

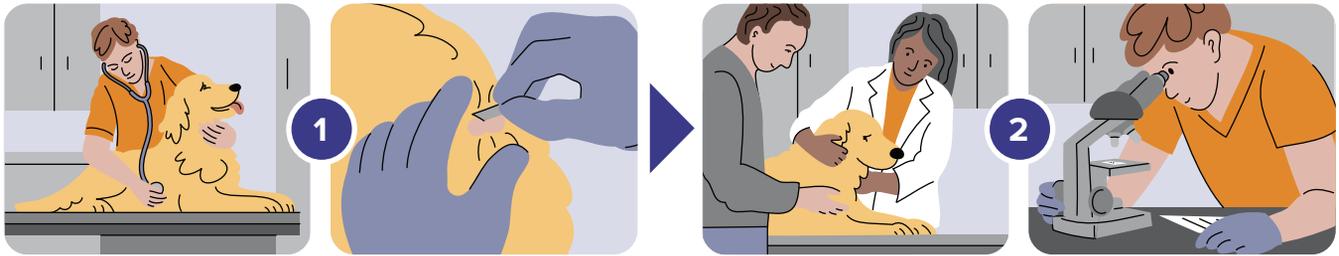
- Teaching sets of cytologic samples collected for training purposes
- Training videos, particularly if technicians have on-demand access
- A dedicated space for telehealth consultations that is well lit and quiet with a computer camera
- Locally offered continuing education courses or sessions put on by colleges and/or associations
- In-house continuing education for the whole veterinary team, including technicians and the veterinarian(s)

A veterinarian working with two technicians can see two appointments in the time it would otherwise take to see one. As Figure 7 shows, technicians can interface with clients from the beginning of an appointment through discharge and beyond. Having established a relationship with clients, they can be trusted team members for follow-up checks and maintenance program assistance. Working this way, a diagnostic plan can be developed for multiple patients in the time it could have taken to see only one patient.

Section 8: Client Communication

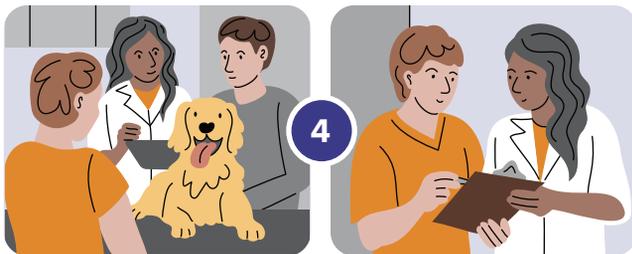
Top 3 Takeaways:

1. Be clear about timelines and expectations—diagnosing and finding the right combination of treatments may take 2–4 mo or sometimes longer.



Tech 1 in Exam 1 obtains a detailed dermatologic history and quick physical examination, and collects the minimum dermatologic database (flea combing/cytologies/skin scrapings).

Dr. enters the room, performs a physical exam, and asks additional history/follow-up questions WHILE **Tech 1** is processing slides and documenting findings.



Tech 1 brings results to Dr. in Exam 1. Final plan is formed.



Tech 2 in Exam 2 obtains history, quick physical exam, and minimum database.



Dr. moves to Exam 2 to conduct a physical exam of the patient and discussion with the client. **Tech 2** is processing and documenting minimum database results.



Tech 1 implements the plan for the patient in Exam 1, acquires further diagnostics, gathers prescriptions, and instructs the client on administration, expectations, and follow-ups.



Dr. moves on to the next exam room, and **Tech 2** implements the plan for the patient in Exam 2.

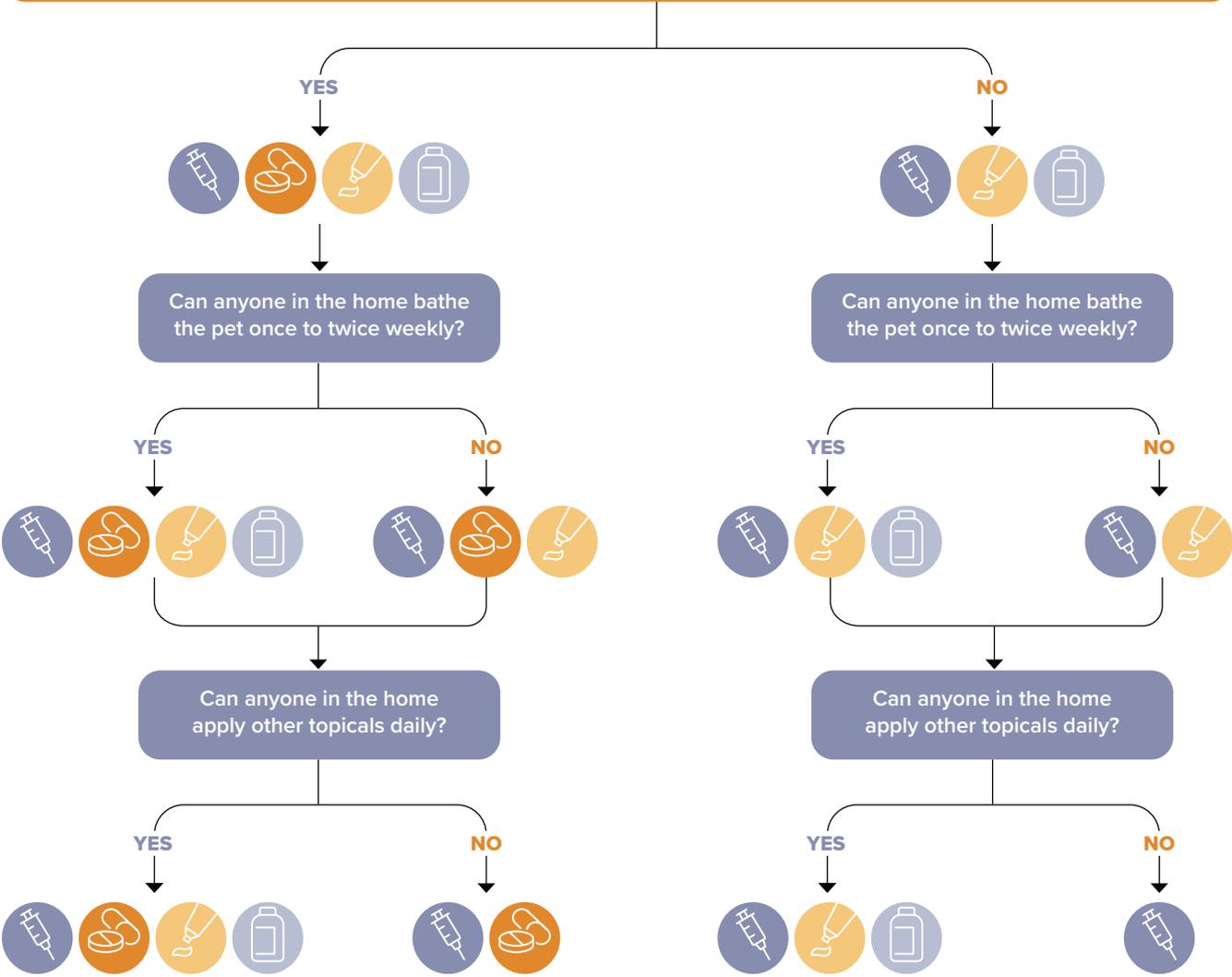


Tech 2 brings results to Dr. in Exam 2, and the final plan is formed.

FIGURE 7

Flowchart of Technician Utilization for Allergic Skin Diseases.

Can oral medications be given by the caregiver or family members once every 8, 12, or 24 hr?



 <p>Injectable administration: antibiotics, lokivetmab.</p>	 <p>Oral administration: ectoparasite treatment/ preventive, antibiotics, antihistamines, oclacitinib, cyclosporine, steroids.</p>	 <p>Topical applications except for medicated bath: sprays, ointments, drops, flush, mousse, or wipes.</p>	 <p>Topical application with medicated bath using medicated shampoo.</p>
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FIGURE 8
Client Communication Flow Chart for Treatment Plans.

2. Openly discuss any client constraints at the first appointment, including time, work schedule, household environment, and financial concerns, so a realistic plan can be made.
3. Prepare clients for the fact that flares occur even in well-managed cases so that they do not get frustrated when they happen.

Overview

Effective client communication is vital in every aspect of a practice. However, client communication becomes even more paramount when initially explaining diagnostic options, time frames, and treatment variables for allergic dogs and cats. With most of these patients, this is the start of a long journey, and clients should be informed that there are likely no quick fixes or cures, only lifetime management strategies.

How effectively the veterinary team explains short-term and long-term steps toward relief and healing will set up the client's expectations for what lies ahead.

Communication should start at the first appointment and carry on throughout all follow-up visits. It is important to openly, and without judgment, discuss any constraints (e.g., time, work schedules, transportation, finances, and/or inability to administer specific treatments) to better negotiate a plan that cares for the patient and is within the client's capability.

10 Key Messaging Points When Talking to Clients

Each dog and cat will need a specifically tailored plan for the pet and client. Although there are basic steps to follow, some pets will respond to one approach and others to another. Keep in mind that diagnosing allergic skin diseases can be a long process that can become frustrating and confusing for clients.

1. Be clear about goals: The goal is to bring the pet relief as soon as possible, which often requires clearing any secondary infections that may be present, possibly even before the source of the allergy is determined.
2. Be clear about the costs associated with diagnosis and treatment. Emphasize that altering strategies to meet the client's current capacities does not mean substandard care. Offer referral as an option and allow the client to make an informed decision.
3. Provide timelines for clients. Determining the best long-term treatment plan for an individual patient may take 2–4 mo. Be clear about the stages of diagnosis/treatment and what needs to happen concurrently.
4. Let clients know that management of the allergy is for the pet's life and medication adjustments will likely be needed over time. Alert the client that flares are not uncommon, even if their pet is well managed.
5. Strive for empathetic and nonjudgmental communication so that clients feel comfortable expressing concerns, bringing up constraints, and asking questions if they do not understand something. Encourage clients to be active partners in determining the health of their pets.
6. Recognize that clients may suffer from information overload and become overwhelmed during appointments. Provide clear written

instructions and repetition, and if necessary, take a break so they can process the information.

7. Ask the client how they prefer to receive information, for example, verbally, written, or on video. Provide several options and always send home written or recorded instructions they can refer to later.
8. Precise wording and label instructions are keys to good compliance and secondary infection control. For example, to maintain an adequate serum concentration level of cefpodoxime, be sure to say, "Administer one tablet by mouth at the same time once every 24 hours," instead of saying, "Administer one tablet daily."
9. Praise clients for compliance when they bring their pets for rechecks, even if the improvement is slight.
10. Be sure to talk to clients about ongoing monitoring, like blood work, depending on what medications their animal is receiving.

Summary

Managing allergic skin diseases in dogs and cats requires a multimodal, communication-rich approach to ensure positive outcomes. A detailed history must be taken, including response to previous treatment, and a physical examination must be performed with particular attention to ears, skin folds, and paws. A minimum dermatologic database should be collected (cytology of skin and ears, skin scrapings, \pm DTM). Optimal technician utilization can result in more efficient intake, management, and follow-up of cases. Effective communication with clients is crucial for these often-frustrating cases. Clients must be prepared for the fact that these cases require lifelong maintenance and treatment for the occasional flares that will occur even in the most well-managed patients. Collaborative care with dermatology specialists has been shown to increase client satisfaction and speed resolution of cases and should be considered early for some patients. SOC considerations entail "meeting clients where they are" and providing viable options, while emphasizing that these options do not mean the pet is getting substandard care. ■

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