Earlier dermatology referral rewards primary care practice (part 1): easing client expenses and enhancing patient care

A new survey from the American College of Veterinary Dermatology shows why patients with dermatologic conditions should be a higher priority for referral

written by

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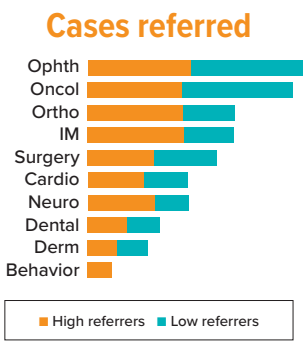

Figure 1. High vs Low Referral Rates per Veterinary Specialty Group

(Source: IdeaSpan, Inc: Unpublished data, May 31, 2016)

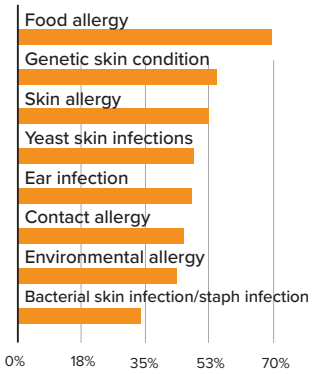

Figure 2. Diagnoses (average %) Offered by Primary Care Veterinarians That Did Not Match Veterinary Dermatologists' Diagnoses

Pets with dermatologic problems provide a substantial caseload in primary care veterinary practice. It's often difficult to identify the underlying and contributing causes of dermatologic conditions, so it can be challenging to effectively and efficiently treat these patients while satisfying clients' expectations. Such challenges may arise in part because of clients' financial, emotional, physical, or time constraints that delay or prohibit diagnostic testing and treatment or prevent clients from completing their pets' prescribed therapies.

New client survey data from the American College of Veterinary Dermatology (ACVD) indicates that referral to board-certified veterinary dermatologists earlier in the patient evaluation process may alleviate some of these client constraints and benefit primary care practices, their clients, and dermatology patients.

SURVEY PURPOSE AND DESIGN

Dermatology referrals may not be top of mind for primary care practitioners because unlike pets presented with orthopedic, neurologic, or cardiac issues that require immediate referral to a specialist, pets with dermatologic disease less frequently present with problems that seem urgent or life-threatening. In fact, veterinary dermatology has the second-lowest referral rate among several veterinary specialty groups (**Figure 1**).

In 2019, I partnered with the ACVD to survey clients' perceptions of primary vs specialty veterinary care related to their dogs' signs of dermatologic problems. Clients were recruited to participate from veterinary dermatology specialty practices in the United States (95% of participants) and Canada, and clients must have visited a primary care veterinarian for their dog's preliminary examination and diagnosis.

Clients answered online retrospective survey questions about their dogs' exams, diagnoses, and treatments delivered by their primary care veterinarian and by a board-certified veterinary dermatologist. The dogs presented for evaluation of a variety of dermatologic issues such as pruritus, ear problems, coat changes, and skin lesions including masses.

Of the 283 clients who were included in the survey, 77% had first noted their dog's dermatologic problem within the 2 years preceding the survey.

RECURRENT PATIENT VISITS

Twenty-seven percent of clients reported that their dogs were successfully treated after their first visit with the primary care veterinarian. However, these clients had visited a veterinary dermatologist because their pet's condition had resolved and then recurred or because the condition was the first episode of a chronic problem.

Most clients (73%) reported that they visited their primary care veterinarian more than 3 times for evaluation of their pet's dermatologic condition before they were offered a referral to a board-certified veterinary dermatologist. Of these clients, 42% had visited their primary care veterinarian an average of 5 times before referral and 31% had sought a second opinion from another primary care veterinarian.

DIAGNOSIS DISAGREEMENTS

Primary care veterinarians may delay referring their patients for specialty care because they have confidence in their treatment selection and efficacy. Yet while therapeutic options for dermatologic conditions abound, having the knowledge and experience required to use them optimally is paramount. The presenting clinical signs for many skin conditions overlap substantially and complicate diagnosis, so correctly identifying a patient's clinical signs and subtle cytologic features is needed to institute efficient and effective treatment.

Along these lines, the ACVD survey revealed that across all the dermatologic diagnoses made by primary care veterinarians, 46% did not match the veterinary dermatologists' diagnoses. The top 3 diagnosis mismatches were food allergy, breed-associated genetic skin condition, and skin allergy (**Figure 2**). Incomplete or inaccurate diagnoses can contribute to the treatment failure and disease recurrence rates of dermatologic problems and result in repeat patient visits.

The good news is that across all the dermatologic diagnoses made by primary care veterinarians, 54% matched the veterinary dermatologists' diagnoses. However, repeat patient visits may still occur if the prescribed treatments are ineffective or if clients do not use them properly. Clients reported that 16% to 28% of the treatments prescribed by their primary care veterinarians were ineffective and that 4% of the treatments prescribed by veterinary dermatologists were ineffective. These observations suggest earlier referral is beneficial because veterinary dermatologists consistently prescribe more effective treatment.

COSTS AND CONSEQUENCES OF CLIENT FRUSTRATION

The 73% of clients who visited their primary care veterinarian more than 3 times for evaluation of their pets' dermatologic problems reached a "tipping point of frustration." This tipping point was defined as when the primary care veterinarian couldn't control, diagnose, or resolve the pet's dermatologic problem after 3 visits or after the client had spent $925.

Of these clients, 15% stopped visiting their primary care veterinarian for their pets' routine veterinary care and 38% said they would not return to their primary care veterinarian for their pets' pressing medical issues. This illustrates that primary care veterinarians risk losing future practice revenue generated by those pets (as well as revenue potentially generated by other pets in those households) by not referring clients to a veterinary dermatologist by the third visit for evaluation of patients' dermatologic problems.

REDUCING CLIENTS' COSTS AND ENHANCING PATIENT CARE

Referral to veterinary specialists can be considered 1 component of offering clients a spectrum of care. Spectrum of care encompasses a wide variety of evidence-based diagnostic and treatment options—ranging from basic, lower-cost, and low-tech care options to those that are advanced, higher-cost, and state-of-the-art.[1] Spectrum of care should mesh with each client's resources, values, and goals of their pet's care, as well as with a practice's resources and veterinarian's knowledge and skills.[1]

Primary care veterinarians may hesitate to refer patients for specialty care because they anticipate that clients will incur higher costs, or clients may decline referral because of perceived higher costs. However, the ACVD survey revealed that veterinary dermatologists addressed dogs' issues in an average of 3.8 visits at an overall lower cost. The data showed that the 42% of clients who averaged 5 visits to their primary care veterinarian before referral to a dermatologist would have saved 25% in costs if they had been referred by the tipping point of 3 visits. Furthermore, the 31% of clients that obtained a second opinion from another primary care veterinarian would have saved substantially more than 25% in costs.

FURTHER DISCUSSION

In a future issue of *dvm360®*, part 2 of this article series will discuss the boost to client satisfaction that earlier dermatology referrals can have. In addition, it will cover the benefits to the patient of collaborative care between primary care veterinarians and specialists.

References available online at dvm360.com

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NexGard®
(afoxolaner) Chewables

Brief Summary: Before using NexGard® (afoxolaner) Chewables, please consult the product insert, a summary of which follows.

CAUTION: Federal (USA) law restricts this drug to use by or on the order of a licensed veterinarian.

Description: NexGard is a soft chewable for oral administration to dogs and puppies according to their weight. Each chewable is formulated to provide a minimum afoxolaner dosage of 1.14 mg/lb (2.5 mg/kg).

Indications: NexGard kills adult fleas and is indicated for the treatment and prevention of flea infestations *(Ctenocephalides felis),* and the treatment and control of *Ixodes scapularis, Dermacentor variabilis, Amblyomma americanum,* and *Rhipicephalus sanguineus* infestations in dogs and puppies 8 weeks of age and older, weighing 4 pounds of body weight or greater, for one month. NexGard is indicated for the prevention of *Borrelia burgdorferi* infections as a direct result of killing *Ixodes scapularis* vector ticks.

Dosage and Administration: NexGard is given orally once a month, at the minimum dosage of 1.14 mg/lb (2.5 mg/kg). See full product insert for dosing table and details.

Warnings: Not for use in humans. Keep this and all drugs out of the reach of children. In case of accidental ingestion, contact a physician immediately. Keep NexGard in a secure location out of reach of dogs, cats, and other animals to prevent accidental ingestion or overdose.

Precautions: Afoxolaner is a member of the isoxazoline class. This class has been associated with neurologic adverse reactions including tremors, ataxia, and seizures. Seizures have been reported in dogs receiving isoxazoline class drugs, even in dogs without a history of seizures. Use with caution in dogs with a history of seizures or neurologic disorders.

The safe use of NexGard in breeding, pregnant or lactating dogs has not been evaluated.

Adverse Reactions: In a well-controlled US field study, which included a total of 333 households and 615 treated dogs (415 administered afoxolaner; 200 administered active control), no serious adverse reactions were observed with NexGard.

Over the 90-day study period, all observations of potential adverse reactions were recorded. The most frequent reactions reported at an incidence of > 1% within any of the three months of observations are presented in the following table.

Table 1: Dogs with Adverse Reactions.

	Treatment Group			
	Afoxolaner		Oral active control	
	N[1]	% (n=415)	N[2]	% (n=200)
Vomiting (with and without blood)	17	4.1	25	12.5
Dry/Flaky Skin	13	3.1	2	1.0
Diarrhea (with and without blood)	13	3.1	7	3.5
Lethargy	7	1.7	4	2.0
Anorexia	5	1.2	9	4.5

[1] Number of dogs in the afoxolaner treatment group with the identified abnormality.

[2] Number of dogs in the control group with the identified abnormality.

In the US field study, one dog with a history of seizures experienced a seizure on the same day after receiving the first dose and on the same day after receiving the second dose of NexGard. This dog experienced a third seizure one week after receiving the third dose. The dog remained enrolled and completed the study. Another dog with a history of seizures had a seizure 19 days after the third dose of NexGard. The dog remained enrolled and completed the study. A third dog with a history of seizures received NexGard and experienced no seizures throughout the study.

Post-Approval Experience (July 2018): The following adverse events are based on post-approval adverse drug experience reporting. Not all adverse events are reported to FDA/CVM. It is not always possible to reliably estimate the adverse event frequency or establish a causal relationship to product exposure using these data.

The following adverse events reported for dogs are listed in decreasing order of reporting frequency for NexGard: Vomiting, pruritus, lethargy, diarrhea (with and without blood), anorexia, seizure, hyperactivity/restlessness, panting, erythema, ataxia, dermatitis (including rash, papules), allergic reactions (including hives, swelling), and tremors.

Effectiveness: See full product insert for details regarding Effectiveness.

Animal Safety: In a margin of safety study, NexGard was administered orally to 8 to 9-week-old Beagle puppies at 1, 3, and 5 times the maximum exposure dose for a total of six treatments. There were no clinically-relevant effects related to treatment on physical examination, body weight, food consumption, clinical pathology (hematology, clinical chemistries, or coagulation tests), gross pathology, histopathology or organ weights. Vomiting occurred throughout the study, with a similar incidence in the treated and control groups, including one dog in the 5x group that vomited four hours after treatment.

In a well-controlled field study, no adverse reactions were observed from the concomitant use of NexGard with other medications.

Contact Information: For a copy of the Safety Data Sheet (SDS) or to report suspected adverse drug events, contact Boehringer Ingelheim Animal Health USA Inc. at 1-888-637-4251. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or www.fda.gov/reportanimalae.

The information provided here is not comprehensive. The full FDA-approved product insert is available at www.nexgardfordogs.com. Consult your veterinarian for further information.

Product approved by FDA under NADA # 141-406

Marketed by: Frontline Vet Labs™, a Division of Boehringer Ingelheim Animal Health USA Inc. Duluth, GA 30096

NexGard® is a registered trademark and FRONTLINE VET LABS™ is a trademark of the Boehringer Ingelheim Group.

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