Treatment of canine atopic dermatitis with a commercial homeopathic remedy: A single-blinded, placebo-controlled study

Danny W. Scott, William H. Miller, Jr., David A. Senter, Christopher P. Cook, J. Edward Kirker, Shaun M. Cobb

Abstract — A commercial homeopathic remedy and a placebo were administered orally as individual agents to 18 dogs with atopic dermatitis. The pruritus was reduced by less than 50% in only 2/18 dogs; 1 of these dogs was receiving the homeopathic remedy, the other was receiving the placebo. One dog vomited after administration of the homeopathic remedy.

Résumé — Traitement de la dermatite atopique canine par une médication homéopathique commerciale : étude en simple insu avec témoin placebo. Une médication homéopathique commerciale et un placebo ont été administrés par voie orale comme seuls médicaments à 18 chiens atteints de dermatite atopique. Le prurit a été réduit par moins de 50 % chez seulement 2 chiens sur 18 : 1 de ces chiens recevait la médication homéopathique, l'autre le placebo. Un des chiens a vomi après l'administration de la médication homéopathique.

(Traduit par Docteur André Blouin)

Can Vet J 2002;43:601–603

Introduction

Atopic dermatitis is reported to be the second most common cause of hypersensitive (allergic) skin disease in dogs throughout the world (1,2). It has been estimated that 3% to 15% of the canine population is atopic (1,2). The treatments of choice for canine atopic dermatitis (CAD) are avoidance and specific immunotherapy (1,2). Because avoidance is usually not possible, and immunotherapy is often unsuccessful, many atopic dogs are treated with various combinations of glucocorticoids and nonsteroidal antipruritic agents (antihistamines, omega-3/omega-6 fatty acids, phosphodiesterase inhibitors, leukotriene antagonists) (1,2). In many instances, the expense of these therapeutic protocols can be considerable, side effects can be alarming, and not all patients can be satisfactorily controlled (1,2). Hence, veterinarians are constantly seeking less expensive, safer, more user-friendly therapeutic agents.

The dog-owning public is increasingly interested in "natural" and "alternative" methods of disease management (3). However, the authors are aware of only 2 published scientific studies on the effects of complementary and alternative remedies in CAD (4,5).

Department of Clinical Sciences (Scott, Miller, Senter, Cook), Companion Animal Hospital Pharmacy (Kirker, Cobb), College of Veterinary Medicine, Cornell University, Ithaca, New York 14853 USA.

Address correspondence to Dr. Danny W. Scott.

Reprints will not be available from the authors.

The purpose of this paper is to report the results of a single-blinded, placebo-controlled, study on the efficacy of a commercial homeopathic remedy for the management of pruritus in atopic dogs.

Materials and methods

Twenty-one dogs examined at the Cornell University Hospital for Animals were randomly entered into this study, provided their owners agreed to the protocol. The dogs represented several purebreds and mongrels, included 12 males and 9 females, and weighed from 6 kg to 50 kg (Table 1). Their ages ranged from 1.5 y to 8 y. All dogs were atopic, based on their classical historical and physical findings, their failure to respond to a home-prepared or commercial novel protein diet (given for 4 to 8 wk), and their multiple positive reactions to intradermal or serological allergy tests, or both (1,2). All dogs had nonseasonal pruritus of 1 y to 7.5 y duration. They were free of bacterial and yeast infections and ectoparasites, based on physical examination, negative skin scrapings, and negative cytological examination (1). All dogs had moderate to severe pruritus. The pruritus of all dogs was known to respond completely to anti-inflammatory doses of glucocorticoids (3). The dogs had been treated previously with 1 to 8 nonsteroidal antipruritic agents (including antihistamines, omega-3/omega-6 fatty acids, misoprostol, and pentoxifylline) and had failed to respond. Nineteen of the dogs were not receiving any glucocorticoids or nonsteroidal antipruritic agents during the trial, and had not received these medications for at least 3 wk prior to the study. Two dogs

Table 1. Clinical data on 21 atopic dogs[a]

Case	Breed	Sex	Age (years)	Duration of disease (years)
1	Bichon frise	MC	6	4.5
2	Bichon frise	MC	5	4.5
3	Labrador retriever	MC	8	6.5
4	Golden retriever	FS	7	5
5	Boston terrier	FS	8	7.5
6	Golden retriever	MC	7	6
7	Boxer	MC	8	5
8	Mongrel	FS	3	2
9	German shepherd	MC	6	4.5
10	Labrador retriever	M	4	2.5
11	Shih tzu	FS	5	4
12	Mongrel	MC	4	3.5
13	Mongrel	MC	4	3.5
14	Doberman pinscher	M	2.5	2
15	Mongrel	FS	1.5	1
16	Jack Russell terrier	MC	2	1.5
17	Beagle	FS	7.5	5.5
18	Bichon frise	FS	1.5	1
19	Labrador retriever	FS	3	2
20	Basset hound	FS	5	1
21	Mongrel	MC	5	4

[a]Cases 1, 18, and 20 did not complete the study
MC = castrated male; M = male; FS = spayed female

(cases 2 and 6) were in severe discomfort and glucocorticoids could not be eliminated during the trial. In these dogs, the glucocorticoid dose was reduced until significant pruritus returned, prior to the clinical trial.

The dogs were treated with the commercial homeopathic remedy (Skin and Seborrhea Remedy; HomeoPet, West Hampton Beach, New York) during the first 3 wk of the trial, followed by a placebo (the ethanol-containing vehicle in which the active ingredients are suspended) for the second 3 wk. The dose of both products was 10 drops/dog, q8h, by mouth. The homeopathic remedy contained sulfur, staphysagria, psorinum, graphites, and arsenicum album.

Owners were asked to evaluate the reduction in the degree of pruritus experienced by their pets. Responses were classified as poor (0% to 25% reduction in pruritus), fair (26% to 50%), good (51% to 75%), and excellent (76% to 100%) (2). After both products had been administered, and if one or both of the products was given a "fair", "good", or "excellent" rating, the effective product(s) was readministered for an additional 30-day period to document repeated and sustained efficacy.

Results

A total of 18 dogs completed the study. Two dogs (cases 1 and 18) were dropped from the study due to owner noncompliance. A third dog (case 20) vomited 48 h after starting the commercial homeopathic remedy, and the owner refused to continue the study.

Only one dog (case 2) had a repeated and sustained "fair" response to the commercial homeopathic remedy. Another dog (case 6) had a repeated and sustained "fair" response to the placebo. When the ethanol was removed from the placebo, the beneficial effect was lost. Four dogs (cases 4, 9, 10, and 17) were thought to have a "fair" or "good" response to the commercial homeopathic remedy during the initial 3-week treatment period, but they did not have a repeatable response during the 30-day period. All other dogs received no benefit from either product.

Discussion

Homeopathic medicine is based on the principle of similars; that is, the symptoms or syndromes a substance causes experimentally (at pharmacologic or toxic doses) are those that it may clinically resolve when given in specially prepared, exceedingly small doses to individuals who experienced similar symptoms and syndromes (6). Every homeopathic medicine is tested by experiments called "provings," in which healthy human subjects are given repeated doses of a substance from the plant, mineral, or animal kingdom (6). To our knowledge, none of the ingredients in the homeopathic remedy used in our study have been proven to cause dermatitis or pruritus in dogs. Homeopathic remedies are specially prepared small doses that undergo a specific process of consecutive dilution and succussion (vigorous shaking); this process is called "potentization" (6).

The efficacy of homeopathic remedies in veterinary medicine is largely unproven and quite controversial (3,5,6). The authors are aware of only a single previously published scientific study wherein homeopathic remedies were used for the treatment of CAD (5). The products used in that Australian study were different from those used in our study.

In our study, we evaluated a commercially-available, over-the-counter homeopathic remedy for dogs with skin disease. The product contains sulfur, staphysagria, psorinum, graphites, and arsenicum album. These active ingredients are suspended in an ethanol solution. According to the product literature, "a synergistic effect between the homeopathics in this complex makes this remedy especially suitable for skin conditions, including seborrhea, pruritis(sic) (itching), allergic dermatitis, and hot dog syndrome." The protocol used in our study was that recommended by the manufacturer.

In our study, only 1 of 18 dogs (5.6%) that completed the trial responded to the commercial homeopathic remedy. Also, only 1 of the 18 dogs (5.6%) responded to the placebo. When the ethanol was removed from the placebo, the response was lost. The potential significance of this finding is unknown, and the authors are not aware of any reported "ethanol-responsive dermatoses." The responses were only "fair" (< 50% reduction in pruritus) in both instances. Both of the responders were also receiving alternate-morning glucocorticoid therapy. However, the owners of both dogs were adamant that the dogs were more comfortable when receiving the homeopathic remedy or the placebo. Perhaps there truly was a synergistic benefit between the glucocorticoids and the other products. This would need to be evaluated in a future study. The 16 dogs that were not receiving glucocorticoids showed no repeatable response to the homeopathic remedy or the placebo. Four dogs were thought to have a "fair" or "good" response to the homeopathic remedy during the initial 3-week treatment, but this response was not repeatable. Transient responses to pharmacologic agents or placebos have been reported previously (2). Such responses could represent "wishful thinking" on the part of the owner, or temporary spontaneous improvement in the dog's allergy. This underscores the importance of demonstrating repeatable and sustained responses to medicines in allergic dogs (2).

The commercial homeopathic remedy was well-tolerated. Only 1 dog experienced a possible side effect; vomiting 48 h after starting the trial. The vomiting ceased within 24 h after the product was stopped. However, the owner refused to readminister the product, thus no cause and effect relationship could be established. The product literature for the commercial homeopathic remedy indicates that, due to the ethanol content, some dogs will salivate or shake their head. This can be overcome by adding the remedy to the patient's food or water, and allowing 10 to 20 min for the ethanol to dilute or evaporate.

In conclusion, under the conditions of our study, the commercial homeopathic remedy was not effective for the treatment of CAD. This is in agreement with the results of a previous report where a different homeopathic remedy was used (5). CVJ

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CORRECTION

The table for the paper entitled "Prevention of pregnancy in the dog with a combination of prostaglandin $F_{2\alpha}$ and bromocriptine" by Colin W. Palmer and Klaas Post (Can Vet J 2002;43: 460–462) was printed with incorrect information. The correct table is as follows:

Table 1. Mean serum progesterone concentrations and the corresponding standard errors for bitches treated with 250 μg/kg of prostaglandin $F_{2\alpha}$ and 10 μg/kg of bromocriptine twice daily for 5 d.

	Concentration, nmol/L (ng/mL)	
Day of diestrus	Mean	Standard error
6	103.41 (32.52)	19.02 (5.98)
7	32.28 (10.15)	7.60 (2.39)
8	9.41 (2.96)	2.89 (0.91)
9	3.12 (0.98)	0.45 (0.14)
10	1.84 (0.58)	0.25 (0.08)
11	2.00 (0.63)	0.13 (0.04)
12	2.89 (0.91)	0.86 (0.27)

Apologies to the authors and to the readers of the *CVJ*. — *Editor*