

Facilitating Dog Cleaning by Owners with Easy-to-Use and Efficient Shampoos

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Received: September 08, 2023; Published: October 20, 2023

Abstract

Giving a bath to a dog can be a real burden and an unpleasant moment for dogs and owners. However, cleaning dogs regularly can be necessary to keep the dog's coat clean and skin healthy. Appropriate veterinary shampoos, efficient, easy to use with one hand to let the other hand hold the dog, and with eco-friendly properties are now sought. The aim of this study was to assess the appreciation and easiness of use, as perceived by dog owners, of new shampoo bottles with a controlled release valve and made of 100% recycled plastic. The perception of efficacy was also assessed.

Thirty-nine dog owners, using shampoos regularly, were selected to try two different shampoos: 19 tried the shampoo for normal skin (Allerderm Normal Skin) and 20 tried the dermatological shampoo for sensitive and itchy skin (Allermyl). Both were in the same type of bottle with a controlled release valve. Owners had to wash their dogs once during the test and reply to a questionnaire to assess the bottle properties as well as the cleaning effectiveness. Questionnaires included ratings from 0 (do not like at all) to 10 (like it very much) and multiple choice questions. Median (range) or percentage of responses were calculated.

The bottle was considered easy to open/close by 97% of owners, easy to apply by 98%, and easy to use with one hand by 77% of owners. Overall, 95% of owners considered the shampoos easy to use. The median ratings for the odor, efficacy, foam, overall results obtained, and skin and coat aspects after cleaning were all equal or above 8/10 for the normal skin shampoo and equal or above 7/10 for the dermatological shampoo. The overall rating for both shampoos was of 8 (5 - 10) over 10.

Thus, the shampoo bottle shape and properties allowed the use with just one hand by most owners and an easy application. The effectiveness was also very well appreciated. The shampoos tested can therefore be used with confidence to facilitate the owner's life when cleaning a dog.

Keywords: Veterinary Shampoos; Allerderm; Allermyl; Dog's Skin; Effective Shampoo; Easy-to-Use Shampoo

Introduction

Giving a bath to a dog who does not like to be bathed can be a real burden and an unpleasant moment for both the dog and the owner. If the dog is not used to bathing, it can struggle and try to escape. Handling the dog while applying the shampoo can then become a difficult task. Cleaning dogs regularly with appropriate shampoos is however necessary to help remove dirt, mud, or other animal feces as well as pollutants, toxic substances, parasites, or microorganisms that can damage their skin or their general health and may even be harmful to the owners [1,2].

There are several shampoos and solutions now on the market but not all of them are adapted to the pet's skin. They can sometimes be too stringent. A good shampoo for pets should have high cleansing properties while respecting the specificities of the pet's fur and skin (such as thicker stratum corneum than humans; more alkaline, neutral pH; or a higher density of follicles) for a good tolerance [3]. Human shampoos are usually not adapted for pets. Good rinsing properties must also be sought to avoid the absorption of surfactants or other components by the dog leaking its fur.

On top of these properties, the shampoo should be easy to use, if possible with one hand while the other hand holds the dog.

Virbac's shampoos (i.e. Derm Clean, Allercalm®, Allermyl®, Seboderm®, Sebolytic®, Pyoderm®) have been recommended by veterinary professionals and used by pet owners for decades. They are known for their high quality and efficacy and some have been the subject of different studies [4-7]. New bottles for these shampoos have now been developed with an optimized delivery system. It is a bottom-opening bottle with a controlled release valve that allows easy dispensing and application with just one hand. On top of that, the bottle is made of 100% recycled plastic and the bottle and cap are recyclable in most countries.

To test the properties of these new bottles, and measure interest, perception, and satisfaction with the new packaging, two of the shampoos (Derm Clean and Allermyl®) in their new packaging (now called Allerderm® normal skin and Allermyl®, respectively) were given to some dog owners.

Allerderm® normal skin is a shampoo adapted for normal skin, for pets with no specific skin condition. It has a gentle and neutral pH formula with a coconut scent, for a pleasant experience. It is designed to help neutralize bad odors and contains ceramides which are naturally present in dog skin [8], to maintain its structure and hydration.

Allermyl® is a gentle, soap-free, hypoallergenic dermatological shampoo for dogs with pruriginous skin and atopic dermatitis [4,5]. It is designed to optimize skin and coat conditions by soothing and moisturizing while maintaining skin barrier integrity and natural microbial balance. Indeed, it contains the Skin Lipid Complex™, a complex of ceramides, cholesterol, and fatty acids, naturally present in the skin, to help maintain its structure [9]. It also contains the S-I-S technology, a combination of two technologies (Glycotechnology and Defensin technology) to help maintain a healthy skin flora and improve skin vitality [10-13].

Aim of the Study

The aim of the study was to assess the owner's perception on the new pack, easiness of use, and effectiveness to clean of these shampoos.

Materials and Methods

Selection of owners and dogs

Thirty-nine dog owners, using shampoos regularly and cleaning their dogs once or twice a month, were recruited in France. There were no specific criteria concerning the dog's age, breed, size, or hair length.

Products tested

Nineteen owners received the Allerderm® shampoo for normal skin (Virbac, France) and 20 owners received the Allermyl® shampoo for sensitive and itchy skin (Virbac, France) to test. They have the same bottle shape but a different formula and viscosity:

Allerderm® shampoo for normal skin has a coconut scent and contains aqua, cleansing agents, cocamidopropyl betainamide meachloride, Vitamin F, Ethylhexylglycerin, Ceramide NG analog, and the anti-odor technology (cyclodextrin and fragrance).

Allermyl® shampoo contains aqua, sodium laureth sulfate, coco betaine, Skin Lipid Complex™ combination (Ceramide NP, Ceramide AP, Ceramide EOP, Cholesterol, Fatty acids), S-I-S Glycotechnology (Rhamnose, Galactose, Mannose, Lauryl glucoside), S-I-S Defensin technology (Peumus boldus leaf extract, Spiraea ulmaria extract), Piroctone olamine and Vitamin F (Linoleic acid, Linolenic acid).

The labels (not final ones) indicated that Allermyl® was for sensitive and itchy skin while Allerderm® was for all skin type (See picture).



picture

Procedure

Owners had to wash their dogs once during the test and reply to a questionnaire to assess the bottle's visual and in-use properties as well as the cleaning effectiveness.

Questionnaires included ratings from 0 (do not like at all) to 10 (like it very much) on some aspects (like bottle size, shape, grip, delivery system, odor, efficacy, etc.), and multiple choice questions (like rating of overall aesthetic, originality, easiness to open or close, etc.).

Data presentation

Data are presented as median (range) or as the percentage of response. No statistics were performed due to the design of the study.

Results and Discussion

Visual assessment

The owners were asked for their opinion on the packaging before using it. Most owners (87%) considered that the overall aesthetics of the packaging was pleasant and the ratings given for the general aspect, size, and shape were very good [medians (range) of 8 (0 - 10), 8 (5 - 10) and 8 (0 - 10), respectively].

Assessment in use

When washing their dogs, 67% of owners applied the shampoo directly on the animal while 33% put it in their hand before applying it on the dog.

The bottle was considered easy to open/close by 97% of owners and easy to use with one hand by 77%. The shampoo was also considered easy to dose and apply on the animal by more than 90% of owners (Table 1). The delivery system (controlled release valve)

and the way the shampoo flows were highly rated (medians of 8/10, Table 1). The shampoo did not leak and the bottle remained clean and not slippery according to 95% of owners or more (Table 1). Finally, the bottle capacity and shape were deemed to be appropriate by 90% of owners or more and the grip received a median rating of 8/10 (Table 1). The bottle was considered easy to stock by all owners.

Indeed, the bottles were designed to avoid the shampoo to leak when held upside-down, thanks to a controlled release valve. Such property was sought to allow the owner to hold the bottle with just one hand while the other one remains available to hold the dog. The results obtained confirm that these goals were achieved.

The bottle is easy to open/close	97%
The shampoo is easy to use with one hand	77%
The product does not leak (even when upside down)	95%
The bottle is not slippery when using it	95%
The shampoo is easy to dose	90%
The shampoo is easy to apply	98%
The bottle shape is appropriate	92%
The bottle capacity is appropriate	90%
The bottle is clean after use	97%
The bottle is easy to stock	100%
Easiness to open rating (Median - range)	8 (5 - 10)
Delivery system rating (Median - range)	8 (3 - 10)
Grip rating (Median - range)	8 (4 - 10)
How the shampoo flows rating (Median - range)	8 (5 - 10)

Table 1: Assessment of the packaging and delivery system when using it. Data are given as median (range) or percentage of owners agreeing with the statement. n = 39.

Assessment of the shampoo formula (odor and efficacy)

The shampoo itself (formula) was then assessed by the owners. The median ratings for the odor during and after cleaning and for the foam were equal or above 8/10 for Allerderm® normal skin and equal or above 7/10 for Allermyl® (See table 2). The median (range) for the efficacy to clean, overall result obtained, coat aspect, and skin aspect after cleaning were of 9 (6 - 10), 8 (6 - 10), 9 (6 - 10), and 8 (5 - 9), respectively, for the normal skin shampoo and 8 (6 - 10), 8 (6 - 10), 8 (6 - 10), and 8 (7 - 10), respectively, for the dermatological shampoo (Table 2).

	Allerderm® normal skin (n = 19)	Allermyl® (n = 20)
Odor during application	9 (5 - 10)	7 (0 - 10)
Odor after cleaning	8 (5 - 10)	7.5 (0 - 10)
Foam	8 (6 - 10)	7.5 (5 - 10)
Efficacy to clean	9 (6 - 10)	8 (6 - 10)
Overall result obtained	8 (6 - 10)	8 (6 - 10)
Coat aspect after cleaning	9 (6 - 10)	8 (6 - 10)
Skin aspect after cleaning	8 (5 - 9)	8 (7 - 10)

Table 2: Assessment of the shampoo odor and efficacy. Data are given as median ratings (range).

Overall ratings

Finally, when all aspects were taken into account, the overall rating after using the product reached a median of 8 (5 - 10) for both products, and 95% of users considered the shampoo easy to use.

The purchase intention was of 90% (84% for Allerderm® normal skin and 95% for Allermyl®) (Table 3). Knowing that the bottles were made with 100% recycled plastic and that it is recyclable had a positive impact for 49% of owners.

Overall assessment/rating	8 (5 - 10)
The shampoo is easy to use	95%
I would certainly or probably purchase the shampoo	90%

Table 3: Overall assessment. Data are given as median (range) or percentage of owners agreeing with the statement.

Interestingly, despite a better scoring of most criteria for Allerderm® normal skin shampoo than for Allermyl® (visual aspect as well as odor, efficacy, foam, and coat aspect, see table 2), more owners were willing to buy Allermyl® than the other product (84% vs 95%). The indication may have played a part in this discrepancy. At the time of the test, the labels indicated that Allermyl® was for sensitive and itchy skin while the other was for all skin type and therefore less specific. Another explanation could reside in the brand name: Allermyl® was a known brand name already on the market while the new name Allerderm® was not known as a shampoo.

Conclusion

Cleaning dogs regularly is part of routine hygiene and can help prevent more serious problems. However, bathing a dog is not always an easy task and can be complicated if the dog is not used to it. Providing products adapted to the dog's skin, efficient to clean, and easy to use by the owner can help for better compliance and a more pleasant experience. In this study, we tested the properties of a new shampoo bottle with a controlled release valve. This pack was designed to avoid the shampoo to leak while being held upside-down and allow the owner to hold the bottle with just one hand while the other one remains available to hold the dog. These new features have been welcomed by the owner since 95% considered the product easy to use and the efficacy to clean was highly rated.

Acknowledgments

The authors would like to thank Patricia Monginoux and Christophe Reme for their help in designing and financing the study.

Conflict of Interest

All authors are Virbac employees and the study was financed by Virbac.

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Volume 9 Issue 1 January 2024

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