

# Don't Overlook Atopy Therapies

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Atopy is an extremely common problem in veterinary medicine today. Atopy is the abbreviated terminology used to describe allergic dermatitis, which is caused by environmental allergens. For decades we believed that dogs, cats, and horses were sensitized through the respiratory tract in the same way as humans. However, in the past several years our knowledge of allergic dermatitis in companion animals has increased dramatically and this assumption has been debunked. We now know that allergen sensitization occurs through percutaneous absorption. This fact helps explain why pets with allergy typically do not have respiratory symptoms.

Research has illuminated multiple mechanisms and genetic factors that contribute to the development of atopy.<sup>1</sup> This research supports that atopy is primarily a genetically inherited disease. Clinical experience has shown that atopy worsens with age and does not self-resolve.

Several new treatment modalities for atopy are now available. Six core therapies exist: antihistamines, steroids, cyclosporine, oclacitinib, antibody therapy, and allergen-specific immunotherapy. Allergen-specific immunotherapy remains the only treatment option that can effectively prevent the entire allergic process. Other therapies focus on suppressing symptoms or blocking some aspect of the allergic response.

Immunotherapy is also the only therapy that can prevent new sensitivities from developing and produce a clinical cure.<sup>2</sup>

Lessening allergen exposure remains important regardless of the core therapy utilized. Knowing that allergen exposure occurs through the skin provides us with a huge advantage in this fight. One of the key genetic factors responsible for increasing allergen exposure in atopic animals is reduced ceramide production.<sup>3</sup> Ceramides are a key component of the lipid layer of the stratum corneum. When ceramides are decreased, allergens can more easily cross the skin barrier and become exposed to the immune system. Presentation of an allergen to the immune system then starts a complex series of reactions resulting in allergic inflammation and pruritus. Studies have shown that we can replenish the ceramides missing from the epidermal barrier in a variety of ways.<sup>4</sup> Shampoos, conditioners, sprays, wipes and spot-ons are common modalities.

***Topical therapy works synergistically with systemic allergy treatments by reducing allergen exposure and decreasing the risk of infection.***

There are, however, several important points to remember before promising your clients that ceramides will change the life of their furry friend. Replenishing ceramides is a continual process

## Atopy Therapies (continued)

because the epidermal barrier is in a continual state of renewal. In addition, ceramides must be applied frequently for best effect—typically at least twice weekly. Lastly, the full effect of replacing epidermal ceramides will not be evident until 4 to 8 weeks after treatment begins.

I find that bathing with an antimicrobial shampoo that contains ceramides is very helpful for atopic dogs. Bathing once to twice weekly in this situation is ideal. Medicated baths provide additional benefits for atopic patients by removing infectious organisms, allergens, and inflammatory mediators. Medicated wipes can be useful for all the same reasons. Leave-in conditioners, sprays, spot treatments, and mousse products are quicker and more convenient but don't offer these additional benefits.

Now more than ever, we have a multitude of products to choose from that can help our atopy-afflicted patients live more comfortable lives. A multimodal approach is best for most pets. Topical therapy



works synergistically with systemic allergy treatments by reducing allergen exposure and decreasing the risk of infection.

### REFERENCES

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