

Dr. Rusty Muse (DVM, DipACVD, MANZCVS) received his Doctorate of Veterinary Medicine from Louisiana State University, and became a Diplomate of the American College of Veterinary Dermatology in 1996.

He is a registered specialist in dermatology in Western Australia and currently receives cases in Tustin and Long Beach, CA and Perth, Western Australia.

He is also a sitting member of the Administrative Committee for the World Association for Veterinary Dermatology in his current role as Secretary of the 9th World Congress of Veterinary Dermatology to be held in Sydney, Australia in 2020.

What continues to interest and excite you about dermatology?

[copy] Dermatology cases, to me, are like a challenging puzzle. Every case is slightly different and the clues to solving the puzzle are in the history and physical examination if you pay attention and delve deeply enough. Even after 25 years, I am passionate about managing chronic disease. To me this means educating clients about their pet's condition and how to manage it appropriately. When I can take a concerned and often frustrated client and educate them about what is happening and achieve long-term control, remission, and comfort for the patient, I have done my job. That is what still drives me today.

How has your approach to allergic skin disease and skin infections changed during your time as a clinician?

[copy]We know much more about the pathomechanism of allergy than when I first started my career and we are learning still. Managing allergic skin disease is a combination of controlling the allergic induced itching and managing the secondary infections that occur because of barrier dysfunction. In managing the allergic induced itching, I teach my clients that we need a short-term management plan while we institute a long-term management strategy. This strategy almost always involves allergen specific immunotherapy. Short-term management can usually

be accomplished with various therapies including corticosteroids, fatty acids/antihistamines, cyclosporin, oclacitinib and lokivetmab.

However, the most common problem accounting for apparent treatment failure that we see in referral dermatology is a lack of attention and failure to control secondary bacterial and yeast infections associated with the defective barrier function of allergic pets. Use of oral antibiotics and topical antimicrobial shampoo with concurrent use of topical products to improve the barrier function of the skin are critical in managing these patients.

Lastly, the presence of methicillin-resistant Staphylococcus pseudintermedius (MRSP) has made topical therapy even more critical for successful management. While MRSP is less common in Australia, its prevalence in the US and Europe has changed the way veterinary dermatology is practiced, possibly forever.

What are the main differences between practicing veterinary dermatology in the US versus Australia?

There are several striking differences between Australian and US clients and perhaps the biggest difference is the level of compliance in Australia. Dealing with allergic skin disease requires a multimodal

approach, which can result in a considerable amount of work for the client. In my experience, Australian clients are markedly better at continuity and maintenance of therapy to achieve long term control. They continue to do what you ask, how often you ask and don't stop until you tell them to do so.

From a pet perspective, the biggest difference is the frequency of secondary infection with both sensitive and resistant strains of bacterial organisms. The prevalence of resistant bacteria in the US results in an increased requirement for bacterial culture to guide antibiotic selection. The levels of resistance to systemic antimicrobial therapy have resulted in an increased reliance on topical therapy with chlorhexidine shampoos and other formulations.

The US veterinary community enjoys a host of new and exciting diagnostic tools, therapies and technologies. What should we in Australia be looking out for next when it comes to veterinary dermatology?

So many new pharmaceutical and natural technologies and therapies are available in the US and some are in the pipeline for Australia. Perhaps no other specialty relies on products and therapies the way dermatologists do. Monoclonal antibody therapy targeting interleukin (IL)-31 induced pruritus has just been registered for use in Australia. This drug is a useful tool for the management of short-term pruritus due to atopic dermatitis and success rates have been impressive. Topical therapies including micronized silver for additional antimicrobial benefits have shown good clinical benefits in the US, with some companies actively beginning to explore the market in Australia. Topical therapies including shampoos, spray, wipes and leave-on conditioners including ceramides and fatty acids help to improve barrier function in our patients in the US. Lastly, topical ear products including active ingredients such as ketoconazole and TrizEDTA to help control overgrowth make managing allergic otitis much easier. For diagnostics, MRI and CT in both the US and Australia have made investigation of outer and middle ear disease a more rewarding and exacting process.

Video otoscopy (in conjunction with CT) provides incredible visualization and assessment of the outer and middle ear which helps us save many patients from needing ear canal ablations.

What are your tips and tricks for improving client compliance?

- 1. Educate yourself about the diagnosis and then educate the client. Once you have a firm grasp on the condition, talk to your clients about the prognosis and available therapeutic options. If it is a chronic genetically based disorder (like atopic dermatitis), discuss with them that this condition will require chronic management. Discuss the options that you can offer and also what limitations (time/finances) they may have and how this may impact their management. The most common source of frustration from referred clients is their lack of understanding of the aspects of the primary disease and what options are available.
- 2. Use a white-board in the examination room to help clients visualize what you are talking about. For every client that I see, I draw images, write differentials and diagnostic plans and chart out the game plan for how we are going to manage the pet's skin disease both short and long term. Most people are visual and it makes it much easier to understand and improve compliance if they understand the various aspects of what you hope to achieve.
- 3. Send home detailed discharge instructions. There is no substitute for clear, concise and detailed discharge instructions in managing chronic allergic skin disease. Most clients will follow your instructions if they know what is expected of them. Since most patients are also on multimodal therapy (allergy aspect, secondary infection, ear control, parasite control etc.), I separate each of these to help clients understand which part of therapy is directed towards which part of the problem.



Rusty Muse, DVM, DipACVD, MANZCVS is co-owner of Animal Dermatology Group and currently receives cases in Tustin and Long Beach, CA and Perth, Western Australia.

