



DERM

What's news at Dermcare...

DO THERAPEUTIC SHAMPOOS REALLY WORK?

A Literature Review by Ken Mason

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INTRODUCTION

I am often asked if shampoos are of any medicinal value. Usually the question comes from the more experienced, wiser and skeptical members of the profession. A degree of skepticism and a demand for 'evidence based therapeutics' is a healthy attitude.

WHY WE SHOULD DOUBT

The association of shampoos with the cosmetics industry has raised a healthy doubt in our minds. Every day we are told use shampoo X and you will look like a movie star.

Even the medical and veterinary industries have their deceptions. A telling historical review by Professor Shuster¹ outlines how evidence for a Malassezia cause of human dandruff and seborrhoeic dermatitis was ignored in favour of a hyperproliferative cause. Various producers of cytostatic and keratolytic shampoos offered research funds to investi-

gate and promote the theory. Regulatory authorities became concerned about the possible cancers caused by drugs effecting cell turnover. Research revealed selenium sulphide, pyriithione, salicylic acid etc were in fact antifungal and not cytostatic (keratoplastic).

In another exercise, a report revealed that benzoyl peroxide (BP) was comedolytic. The market was teenage acne and 'follicular flushing' (alliteration - a rhyme of words used in marketing to brand a product) was born. This alliteration was so successful it became fact in textbooks. The scale removing properties of shampoos are in fact a function of the shampoo base which washes away fragments of corneocytes that have swollen and ruptured due to the shampoo removing its wax coating and altering its electrolytic charge².



In this issue.....

The Dermcare Club 2000 is up and running!

Natural Samples are **Hot Stuff!**

Nurses Training Manual

Marauding in Maui

Dermcare continues to grow and grow

NEXT ISSUE

Demodex - A new species

GET STARTED WITH ALOVEEN

and save 12%

By now you should all know about our latest

two products, **Aloveen Oatmeal and Aloe Vera Shampoo** and it's companion product **Aloveen Intensive Leave On Conditioner**. Used together or separately they are great for **soothing and cooling dry, itchy skin**.



So you and your clients can enjoy the benefits of using **Aloveen** Shampoo and Conditioner together and at an affordable price, Dermcare have packaged what we call the '**Aloveen Starter Pack**', a 250mL shampoo and 100mL conditioner conveniently shrink wrapped together.

The **Aloveen Starter Pack** offers a **12% saving** as compared to purchasing the shampoo and conditioner individually. Of course the shampoo and conditioner are still available as individuals. Dermcare are proud to say that to date

Aloveen is available at all veterinary wholesalers and has never been unavailable, as starter packs or individuals!

Share the savings and ask your wholesaler now !!



Alice and Yankee

WE ARE GROWING LOOK WHO IS HERE

We have 3 new staff members at Dermcare to introduce to you. **ALICE COOPER** joins us as the new **Territory Manager for QLD and NT**. Alice has a Science degree and post graduate qualifications in Agricultural Science and is an experienced veterinary nurse.

LOUISA WHEATLEY is a science graduate and looks after Dermcare's Immunotherapy desensitisation vaccines and allergy testing products.

Our R & D department is expanding with the arrival of

NURSES CORNER

NURSE TRAINING MANUAL

Vet nurses are the first line of professional contact with the clients in your practice.

For this reason the team at Dermcare have compiled a comprehensive training manual for nurses.

The manual includes:

- ◆ The differences between human and animal skin.
- ◆ Pictures of disease causing microbes.
- ◆ Information about treatment shampoos.
- ◆ Tips for dealing with tricky client questions.
- ◆ Steps to better merchandising.
- ◆ Improving client satisfaction.
- ◆ Increasing profit.

To obtain a manual for your clinic, contact your

ALOVEEN LEAVE IN CONDITIONER

can be used after any of the Dermcare shampoos. **ALOVEEN LEAVE IN CONDITIONER** helps to leave the coat clean, shiny and smelling great. It is also a great grooming aid as it detangles and moisturises the coat and helps remove the undercoat.

Good things come in small packages but GREAT things come in even larger ones!!

MALASEB and PYOHEX now available in:

**250 mL
500 mL
1L**



GREAT SAVINGS*

Malaseb

500 mL **Save 20%**
1 L **Save 25%**

Pyohex

500 mL **Save 20%**

ECONOMICAL

CONVENIENT

Dermcare's **BIG GUNS** – 500 mL and 1L size Malaseb and Pyohex have been very well received. Once again Dermcare has delivered the goods, you asked for larger sizes of these two great products so here they are. The large sizes are ideal for chronic long term treatments, large breeds, multi-dog households and for in-clinic use.

These large sizes provide a great opportunity to contact your regular, repeat users. A computer record search will reveal your target clients.

For all you vets in New Zealand, if you think the larger pack sizes will go down well with your clients, give Phoenix Pharm a call.

* Australian Prices Only

BONUS SEASON IS BACK with **SPRING SPECIALS**

The Dermcare Club has returned for another season. To become a member of "The Dermcare Club 2000" simply complete the enclosed registration form and fax/mail it to us. The attractions of the Dermcare Club are that it will not mean any extra work for your practice staff and no binding contracts, signatures, standing orders or risk of overstocking. Your practice simply orders when and what you want in any mixed dozen quantity. Send your completed order/bonus form to Dermcare and we will place your order with your preferred wholesaler. Dermcare will either

send you your bonus directly or it will be delivered to you by your Dermcare Territory Manager. Other benefits of the club include guaranteed delivered of Derm News and constant updates on what is happening in the world of Dermatology. Dermcare looks forward to receiving your registration. Oh, and members from last year need not re-register. Your membership will carry over from last year.

Don't forget your once only Spring Special **DOUBLE**

Do Therapeutic Shampoos Really Work? *Continued from page 1*

WHY WE SHOULD BELIEVE

To address this issue we should define what effect is required. The functions of a therapeutic shampoo are

- 1 Cleanse (descale) and deodorise the coat
- 2 Kill and remove build up of infections and allergens
- 3 Remove abnormal sebum and protein acting as nutrients for infection
- 4 Re-establish a healthy microclimate within the coat
- 5 Leave an antimicrobial effect to inhibit recolonisation by the infection
- 6 In some circumstances, aid in penetration of a therapeutic rinse eg. Amitraz for demodecosis and tick rinse.

Infections commonly occurring in the skin are *Staphylococcus intermedius*, *Malassezia pachydermatis* (*Pityrosporum canis*) and the dermatophyte *Microsporum canis*. The first two are residents of the mucocutaneous region, from which they are shed onto the coat and skin during grooming and movement. Small numbers occur on healthy skin, however alteration in the coat microclimate and epidermal barrier function results in microbe proliferation and invasion of the epidermis and follicle. Epidermal thickening and increased desquamation of scale is a protective response of the skin to the invasion of pathogens and their toxic metabolites.

Spores of the dermatophyte *M.canis* are released from infected hair into the environment to infect other skin areas or hosts. Ringworm can be a serious persistent and disfiguring disease of children and immuno-compromised adults.

Benzyl peroxide (BP) and ethyl lactate (EL) shampoos were shown to have good efficacy in the French literature³. However, to generate data independent of commercial interests, Kwochka⁴ compared 3% BP, 1% iodine complex, 0.5% chlorhexidine (CHG) and 0.5% triclosan shampoos in dogs artificially challenged with *Staph*. 3% BP was better than 0.5% CHG and both were significantly more effective than the oth-

ers.

Then Campbell⁵, looked at the shampoo efficacy against naturally occurring *Staph*. cutaneous overgrowth and found that 1% CHG was superior to 3% BP and both much better than EL and triclosan. This indicated a dose response effect.

The first dose response study on an antimicrobial shampoo was published by Cauwenbert⁶ for ketoconazole against seborrhoeic dermatitis in man. The optimal concentrations were 2% then 1% however 5% and 25% ketoconazole were significantly less active. In developing Pyohex, Dermcare commissioned a similar study at the University of Queensland, which revealed that for surface infections 2% chlorhexidine was adequate, for deeper infections 3% was optimal and that 4% was less active than 2% & 3% in a shampoo base. Logically deeper infections require higher 3% concentration, however the finding of 4% being less effective and explaining this along with the similar finding in the ketoconazole study, is more difficult. We know, for example, that there is an optimal combination of surfactant wetting agents needed to apply insecticide rinses to sheep and dog coats. More surfactant will increase the drug penetration of the coat, but will also wash the drug from the coat, reducing residual action. Since CHG is a cationic surfactant this could explain the reduced activity of the 4%. The ketoconazole shampoo result might be a failure of optimal surfactant:drug ratio, reducing penetration of active on the scalp ie. too much active and not enough shampoo base. All this is well and good but will it work in a clinical setting?

Bond⁷, from the Royal Veterinary College published a

Keep Your Natural Shampoo

Recently a disturbing incident was reported to one of Dermcare's detectives (aka Ian Fontaine).

A certain veterinary clinic north of Sydney was burgled one evening, but fortunately (or unfortunately!) the only thing missing was their box of Dermcare Natural Shampoo samples.

So a word of warning to all of the clinics out there that request our samples, keep them under lock and key!!

By the way Merewether V.H. more samples are on their way!!

PRACTICE TIP

Malaseb is equally effective against Seborrhoea sicca (dry, waxy sebum) and Seborrhoea oleosa (oily se-



Do Therapeutic Shampoo's Really Work? *Cont from page 3*

blinded efficacy trial - Malaseb vs selenium disulphide shampoo on Basset hounds with seborrhoeic dermatitis associated with *Malassezia pachydermatis* and *Staphylococcus intermedius* overgrowth. Malaseb significantly resolved clinical signs while reducing bacteria and yeast to normal or below counts. Studies in Australia by the author and Professor Rick Atwell and in the USA by Dr Valerie Fadok and Dr Helen Power (dermatologists) also confirmed similar results.

Bond⁸, also studied the effect of Malaseb on the mucosal carriage of *M.pachydermatis* and found Malaseb eliminated the organism from the mucosa whereas the selenium disulphide did not, which he thought may have contributed to the superiority of the Malaseb.

Dr Sue Patterson⁹ (UK dermatologist), assessed the value of Malaseb as an adjunct to griseofulvin in treating and eliminating *M.canis* from chronically infected Persian cats. She reported to the Third World Congress in Veterinary Dermatology and The Journal of Small Animal Practice that Malaseb significantly reduced lesion scores and surprisingly eliminated the infection from the environment.

In an experimental *M.canis* infection of kittens, DeBoer and Morello¹⁰ reported that 0.5% chlorhexidine shampoo followed by a 2% CHG rinse failed to influence the course of the infection. They went on to show that even enilconazole fumigating, chlorhexidine and dilute hypochloride failed to eliminate *M.canis* spores from the environment. It took concentrated and dangerous levels of bleach or formalin to kill spores on cement floors. This contrasts to Patterson's finding, that adding Malaseb shampoos to a regimen of griseofulvin tablets and vacuuming, successfully eliminated *M.canis* from a carpeted house.

A Bristol University study using artificially infected kittens in a controlled environment confirmed Patterson's findings¹¹. Patterson also reported, in a published paper, Malaseb to be equally effective in Equine dermatophytosis¹².

To assess the role of CHG, miconazole (MN) and the surfactant in the beneficial effect observed by Patterson, a University of Queensland study in Professor Frost's laboratory confirmed the value of the combination of CHG and MN (Malaseb) over each alone in a Persian breeding colony chronically infected with *M.canis*. This is due to the synergistic interaction of the antimicrobial properties of CHG and MN¹³.

In summary, shampoos have in more recent times proven to have a beneficial effect on cutaneous infections. Some might wonder why Dermcare products feature so much in this review. Apart from the obvious, at this point in time only Dermcare products have been tested independently and the results published. In fact, Malaseb is the most studied veterinary shampoo if publications in Referred Scientific Journals are anything to go on. Dermcare currently exports all over the world. Just a little Aussie invention that did not give way to overseas control.

There are many testimonial reviews of veterinary shampoos by leading world opinion makers in the scientific literature but very little solid data. To finish with a quote from Professor Shuster on seborrhoeic dermatitis 'But in passing it is important to note that the success of the hyperproliferative theory was not due to scientific solidarity but to its being taken up, broadcast and magnified by vocal opinion leaders and that is how it came about, that an idea as unsupported as the hyperproliferative theory was accepted unquestionably and held

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Fun and Games in Maui



Ken Mason, Greg Burton, Michael Shipstone, Allan Bell, Linda Vogelnest, Ralf Mueller, Kirsty Hailstone, Richard Kneivitt, Lisa Mason, Duncan Graham, Jonathan Adams, Amanda Burrows and Julie Yager.

The annual conference of the American Academy and College of Veterinary Dermatology was held this year in Maui, Hawaii. This photograph of the ANZAC contingent was taken before someone was hospitalised with suspected spinal injuries from racing down a volcano on a bike and another was stabbed by a sea urchin! Both were of course rushing to lectures. Needless to say everyone had a great time.