

〈原 著〉

ASR 系貧毛ミニブタの皮膚における角層をターゲットとした
外用剤の保湿効果の持続性の検討
——コルネオセラピーの効果——

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**Comparative Study of the Efficacy of Various Moisturizers
Using the Skin of the Miniature Swine/ASR
——Effectiveness of corneotherapy——**

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Abstract

The outlook of the poorly haired miniature swine (ASR) skin resembles that of ichthyosis vulgaris or senile xerosis in humans showing scaly, cracked and fissured skin surface. Thus, by using the skin of this animal, we studied the effects of several moisturizers on the stratum corneum function. The study was carried out in the months from January to March. We compared the effects of petrolatum, 10% salicylic acid in petrolatum, proprietary heparinoid-containing ointment and another proprietary 10% urea cream. Applying each agent to 7 randomly selected skin areas ($2 \times 2 \text{ cm}^2$) in the back of a 6-month-old swine once daily or every 2 days for various periods of time. We measured high frequency conductance using a Skin Surface Hygrometer (Skicon-200®; IBS Ltd., Hamamatsu, Japan) everyday thereafter. We found that such agents as 10% salicylic acid in petrolatum and heparinoid ointment exerted moisturizing effects lasting even for 3 weeks after discontinuation of treatments.

Key words: moisturizer, stratum corneum, miniature swine/ASR, corneotherapy, high frequency conductance.