

# Evidence-Based Skincare: The Importance of Offering Moisturization, Relief, and Protection in Common Skin Disorders

Over the past decade, seismic growth occurred in our basic understanding of the epidermal barrier function and its role in modulating skin health. With the increased attention to epidermal barrier function and strategies to help normalize it, the role of topical skincare and unique formulations designed to capitalize on this knowledge is now paramount. Given the robust armament that now enhances clinical space, there is also a greater demand for evidence supporting the claims that define “moisturization” or “barrier repair.” The purpose of this supplement is to provide both the biological basis and clinical impact of several targeted products aimed at specific physiologic and pathologic states including aging skin, diaper dermatitis, occupational irritant dermatitis, and atopic dermatitis.

Even in the healthy aged population, chronologically expected changes occur, including the anatomy and functionality of the skin. The epidermis begins to thin, with an increase in transepidermal water loss and a noticeably dry and scaly skin surface. Furthermore, there is a steep decrease in stratum corneum lipids with age, resulting in a downturn in the level of ceramides further contributing to these changes. In their paper, “Efficacy of a Skin Condition-Adapted Solution for Xerosis and Itch Relief Associated With Aging” Ramsin and Friedman review the characteristic biological changes inherent in skin aging and review the data from several clinical trials utilizing products containing integral elements of the barrier, such as urea.

On the other end of the spectrum, neonates and infants are also burdened by unique biological and situational elements that predispose to irritant contact dermatitis. In his paper “Protective Effect of a Diaper Rash Ointment for Diaper Dermatitis,” Dr. Peter Lio reviews the data from a multicenter open-label trial of 60 infants (1 - 36 months) with a known history of recurrent diaper dermatitis showing that an almond oil based ointment confers a protective effect from future episodes of diaper dermatitis, and improves dryness and suppleness of skin.

In a more regional focus, hand dermatitis is the most common occupational irritant and contact dermatitis, which has a major impact on quality of life in certain professional arenas. Dr. Laura Jordan reviews the ins and outs of occupational irritant contact dermatitis and provides a multi-faceted management approach in her paper “Efficacy of a Hand Regimen in Skin Barrier Protection in Individuals With Occupational Irritant Contact Dermatitis.”

Lastly, Dr. Lio focuses on the role of moisturization in the disease prototype of itch and xerosis, in his paper “Efficacy of a Moisturizing Foam in Skin Barrier Regeneration and Itch Relief in Subjects Prone to Atopic Dermatitis.” In this single center open label study, 26 adults previously diagnosed with AD without active lesions were treated with a single application of an anti-itch foam and reported immediate relief of clinical signs of AD, including pruritus as assessed by both the subjects and the investigators, among other data points, highlighting the important role of barrier repair/restoration in the management of this common and chronic inflammatory disease.

Certainly this supplement provides a whirlwind overview and evidenced based management strategies of cutaneous pathologies all unified by one theme – barrier disruption. Enjoy!

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## Disclosures

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