**Clinical Effectiveness of Topical Non-Steroidal Products in Pruritic Dermatoses Patients – Case Studies**

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**Introduction**
Atopic dermatitis is a common inflammatory dermatologic disorder characterized by moderate to severe pruritus. The condition begins in childhood and tends to wax and wane in intensity. The etiology is unknown although abnormalities of skin barrier function and bacterial colonization have been linked to the pathogenesis. Topical steroids are the mainstay of treatment and are utilized acutely to reduce inflammation, itching and lichenification. However, certain drawbacks may limit their use. Prolonged use of mid- to high-potency topical corticosteroids is generally avoided on the face, neck and intertriginous areas in an effort to mitigate the risk of skin atrophy and striae. Other complications could include acneiform eruptions and hypopigmentation. There are also concerns regarding treatment of large body surfaces, as use may result in side effects due to systemic absorption. Topical antibacterial products are also used to decrease the bacterial count and help prevent future disease flares.\(^1\)

**Overview**
Two topical non-steroidal products available for the management of various dermatoses, including atopic dermatitis, warrant consideration as therapeutic options. ATRAPRO™ Antipruritic Hydrogel, a Microcyn\(^\text{\circledR}\) based product, is a non-oily, pH neutral hydrogel dressing that is indicated for the relief of pain, burning and itching associated with various dermatoses, including atopic dermatitis and radiation dermatitis. NEOSALUS® Cream is a Proderm Technology™ based barrier repair product, indicated for the management of various dermatoses, including atopic dermatitis and allergic contact dermatitis. It is a fragrance-free, non-comedogenic and water soluble product formulated to help repair, protect and hydrate the skin barrier.

The products have been previously studied alone and in combination with each other.

In an evaluation of ATRAPRO™ Antipruritic Hydrogel alone, a 14-day pilot study of 17 adult subjects with mild to moderate atopic dermatitis with associated pruritus was conducted. Treatment with ATRAPRO™ Antipruritic Hydrogel resulted in 82% of subjects reporting itch relief by Day 3. In addition, 76% of subjects experienced improvement by Day 14 on the Investigator’s Global Assessment.\(^2\)

A second study involving ATRAPRO™ evaluated the effects of sequential use with NEOSALUS® Cream in an open label design. Fifteen patients ranging in age from 7 months to 49 years participated in the 14-day assessment. Sequential application of the two products demonstrated a rapid reduction in itch severity and overall improvement in signs and symptoms. The products provided relief of itching and symptoms and helped to initiate the healing process by mitigating exacerbation caused from the scratch cycle; NEOSALUS® Cream helped to protect the skin, provide hydration and aid in the restoration of the skin barrier.\(^3\)

**Results**
The authors participated in a 4-week follow-up study to further evaluate the efficacy of sequential application of the non-steroidal combination and determine whether the order of application would affect therapeutic results. Presented here are two case examples of enrolled patients. Before and after clinical photos and evaluation of signs and symptoms were used to document clinical outcomes. The authors postulate that the NEOSALUS® helps improve the skin barrier function and the ATRAPRO™ hydrogel diminishes pruritus and may decrease bacterial colonization.

**Case Study 1**
Female, age 17, had a pruritic eruption on the abdomen for 2-3 months. Dx: eczematoid dermatitis. Treated with ATRAPRO™ first, followed by NEOSALUS®.

**Case Study 2**
Male, age 77, presented with painful large blisters on the feet, some discharge and extremely painful and pruritic. Subject was having issues walking. Treated with NEOSALUS® first, followed by ATRAPRO™ second.

**Conclusion**
Use of NEOSALUS® Cream and ATRAPRO™ Antipruritic Hydrogel provide an effective non-steroidal regimen in the management of pruritic dermatoses, regardless of the order of application. Restoration of the skin barrier along with improvement of the signs and symptoms, including pruritus, were observed. These results validate the regimen as an effective non-steroidal treatment option.

**References:**