

ATOPIC ECZEMA/DERMATITIS

EFFECTS OF A NOVEL EMOLLIENT CREAM ON SKIN MOISTURE, EPIDERMAL BARRIER FUNCTION AND ATOPIC DERMATITIS SIGNS AND SYMPTOMS: RESULTS FROM A CLINICAL STUDY

F Gasparri⁽¹⁾

University Of Salerno, Department Of Pharmacy (difarma), Salerno, Italy⁽¹⁾

Introduction: The ability to restore epidermal barrier function, and provide anti-inflammatory/anti-pruritic effects, would extend the role of emollients beyond basic and maintenance therapy in atopic dermatitis (AD) treatment. A novel emollient cream (EC) has been developed containing agents (liquorice extract, niacinamide, laureth-9-polydocanol) that target the underlying AD disease pathophysiology.

Objectives: To evaluate the effect of a novel EC on skin moisture, epidermal barrier function, and AD signs and symptoms.

Materials and Methods: The study enrolled Caucasian patients with clinical signs of AD on symmetrical body areas. Patients massaged EC, twice daily, into clean, dry skin until fully absorbed. Skin moisture, trans-epidermal water loss (TEWL), and clinical signs and symptoms of AD (itching scale: 0 [absent] to 10 [severe]; others: 1 [none] to 4 [severe]) were evaluated after 24 and 48 hours, and 7 and 21 days. Patients completed a questionnaire on Day 21 to assess their satisfaction with the EC.

Results: Ten patients were enrolled in the study (mean age [SD]: 36 [12.5] years; female: 60%). There was a 115% increase in skin moisture with EC at Day 21 versus baseline (mean corneometric units [SEM]: 27.7 [2.5] vs 13.1 [1.0]; $p < 0.001$) and a 52% decrease in TEWL (12.0 [1.3] vs 25.2 [1.1] g/h/m²; $p < 0.001$), with significant improvements evident within 24 hours of treatment initiation ($p < 0.001$). There was no change in the severity of lichenification; however, itching, erythema, desquamation and scabbing were all significantly reduced in EC-treated versus untreated areas on Day 21 (all $p < 0.02$). All patients agreed that the EC was non-greasy, rapidly absorbed and had a pleasant texture, while 80% of patients reported a moisturizing, emollient effect.

Conclusions: The EC may be a useful adjunct to pharmacological therapy in AD as it provides rapid and significant improvements in skin moisture, epidermal barrier function,



and AD signs and symptoms.

