

High Glycerin Hand Cream Provides Relief from Extreme Dryness and Cracking

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Introduction

Dry skin is a family of conditions ranging in severity from dry, powdery appearance to scaling, cracking and fissuring, which can lead to infection. Predisposing factors to dry skin include cold, dry air, repetitive changes in the environment, age, gender, lifestyle or occupation, exposure to solvents and detergents, hot water, intense sun exposure, and conditions such as atopy. Chapping occurs when the stratum corneum becomes dehydrated and inflexible, often as a result of one or more of the factors listed above. If left unchecked, this condition can become a source of infection and a health issue. Today there are good functional hand and body moisturizers on the market. We report here the therapeutic effectiveness of a high-glycerin-containing hand cream. We show high efficacy, even with severely dry, cracked skin. The cream effectively restores healthy skin, and should provide prophylactic benefit when used regularly.

Study Procedure

Investigator-Blinded Controlled Study

Subjects

- All subjects were clinically screened at baseline to have severely dry or severely cracked hands. Severely was defined as scores of 6–8 for dryness or cracking on a 10-point scale. (0=none, 9=extensive cracking, evidence of bleeding, and large dry uplifted scales)

Procedure

- Clinical visits at baseline, days 1, 6, 10, and 28
- Investigator grading for dryness and cracking on 10-point scale
- Instrumental moisturization measurement
- TEWL to assess skin barrier
- Photos to document condition of the hands
- Subject self perception

Results

Investigator Assessment Shows Healing Efficacy

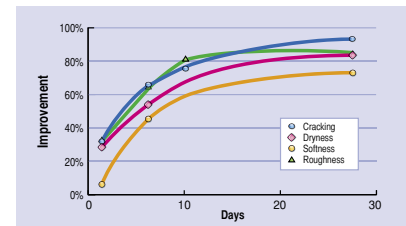


FIGURE 1. By the conclusion of the study all of the subjects responded positively to the hand cream with improvements in skin attributes ranging from 70% to 96% while continuing frequent hand washing.

Subject Evaluation Demonstrates Intensity of Relief

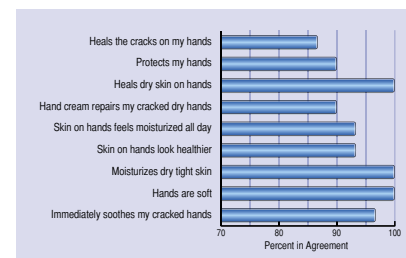


FIGURE 2. The subjects were very satisfied with the test hand cream. All subjects perceived that the hand cream healed and moisturized their dry skin and that their hands were soft.

Instrumental Measurements Provide Evidence of Barrier Repair and Moisturization



FIGURE 3. The hand cream provided dramatic improvements in the overall appearance of dry and rough hands. This subject presented at baseline with severely dry rough hands (grade 7 for cracking on a 10-point scale). At the end of the study the condition is completely resolved (grade=0).

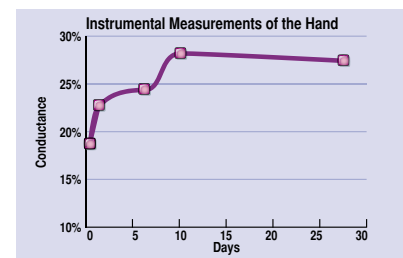


FIGURE 4. Instrumental measurements reveal that the hand cream effectively delivers and maintains water in the stratum corneum.

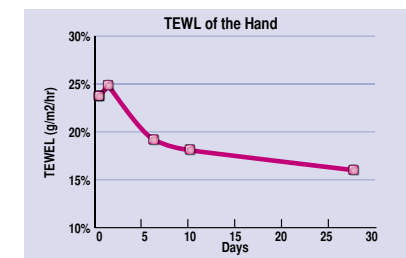


FIGURE 5. Transepidermal water loss (TEWL) measurements support that the cream quickly and effectively restores stratum corneum integrity, a central characteristic of healthy skin.

Conclusions

- The hand cream offered rapid resolution of skin cracking and dryness.
- The hand cream provided sustained protection from skin damage, even with continued occupational frequent hand washing.
- Increased moisturization coupled with barrier repair demonstrate improved skin condition that lasts through multiple hand washings.