

Efficacy of an Ointment Body Spray to Improve the Appearance of Dry, Ashy Skin and Alleviate Moderate to Severe Dryness on the Heel

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INTRODUCTION

Aquaphor Healing Ointment's (AHO) efficacy in reducing moderately to severely dry skin is well established. However, application of ointments on large areas can be messy and challenging.

To optimize application, a new-to-market aerosolized Aquaphor Ointment Body Spray (OBS) was developed to enable the delivery of a moisturizing ointment to large areas of dry skin.

Two clinical studies were conducted to evaluate the efficacy of OBS.

STUDY A

OBJECTIVE

- To evaluate the moisturizing efficacy of the Ointment Body Spray (OBS) on large areas of dry, ashen skin of women with darker skin complexions

METHODS

Subjects

- 31 female subjects, 18–70 years old
- Fitzpatrick skin types IV–VI
- Clinically determined, bilateral dry skin on the lower legs

Study design

- Subjects applied the OBS once daily to one leg (randomized assignment) for 2 weeks
- The opposite leg remained untreated

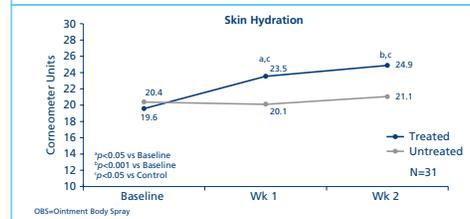
Assessments

- Evaluations were made at baseline, Week 1 and Week 2
- Clinical grading of ashen appearance, dryness, flaking, and radiance using a 10-point scale (0=none, 1 to 3=mild, 4 to 6=moderate, 7 to 9=severe)
- Corneometer measurements (skin hydration) and photography

RESULTS

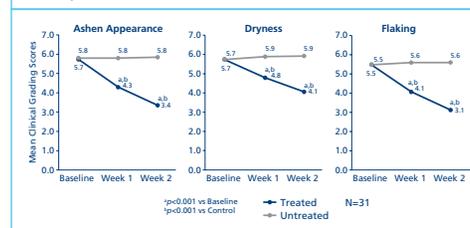
- Once-daily treatment with OBS significantly improved skin hydration at Week 1 ($p<0.05$) and Week 2 ($p<0.001$) compared with baseline and compared with untreated legs ($p<0.05$) (Figure 1)

Figure 1. OBS Significantly Improved Skin Hydration of Dry Skin Compared with Baseline and Untreated Skin



- Clinical grading results showed significant improvements with OBS in all parameters compared with baseline and untreated legs at Week 1 and Week 2 ($p<0.001$) (Figure 2, tactile roughness and radiance data not shown)

Figure 2. OBS Clinical Grading Improvements in Ashen Appearance and Dry Skin Parameters



- Daily treatment with OBS improved ashen appearance, dryness, and radiance in 100% of subjects, improved flaking in 97% of subjects, and improved tactile roughness in 90% of subjects at Week 2 (Figure 3)

Figure 3. OBS Improved Ashen Appearance, Dryness, Flaking, Tactile Roughness and Radiance After 2 Weeks of Daily Use



CONCLUSIONS

- OBS facilitates application of ointment to large areas of the body, such as the lower legs
- OBS was effective at hydrating dry skin and reducing the ashen appearance on women with Fitzpatrick skin types IV–VI

STUDY B

OBJECTIVE

- To test the efficacy of Ointment Body Spray (OBS) to relieve very dry skin on heels compared to Aquaphor Healing Ointment (AHO)

METHODS

Subjects

- 18 male and female subjects, 18–70 years old
- Moderate to severe dry skin on both heels

Study design

- Subjects applied OBS to one heel (random assignment) and AHO to the other once daily for 15 days

Assessments

- Evaluations were made at baseline, Day 5, Day 10, and Day 15
- Clinical grading of dryness, scaling, cracking, and roughness using a 10-point scale (0=none, 1 to 3=mild, 4 to 6=moderate, 7 to 9=severe)
- Photography and HiScope imaging

RESULTS

- Clinical grading scores showed significant improvements in all parameters for both OBS and AHO at Days 5, 10, and 15 compared to baseline ($p<0.001$) (Figure 4)
- No statistical differences were found between AHO and OBS
- Images showed that the efficacy of OBS and AHO are comparable (Figure 5)

Figure 4. OBS and AHO Significantly Improved Dryness, Scaling, Cracking, and Roughness

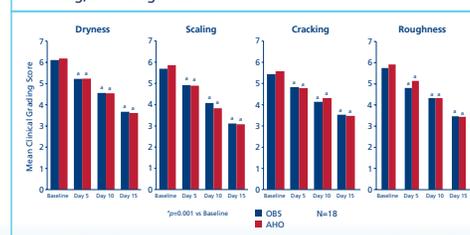


Figure 5. Comparison of Daily OBS and AHO for Treatment of Dry Heel Skin Demonstrated Comparable Efficacy



Results are shown for a single subject. OBS, Aquaphor Ointment Body Spray; AHO, Aquaphor Healing Ointment

CONCLUSIONS

- Both OBS and AHO significantly improved moderate to severe dry skin on the heels, and were not statistically different