Introduction

An effective skincare regimen provides patients with enhanced antiaging and skin quality benefits between visits to the dermatologist. Increasingly, home peels have emerged as a desired consumer product for their ease of use and immediate results noted through skin radiance and smoothness, as well as long term antiaging effects that can be observed with consistent use. A daily home peel was formulated with 0.5% N-acetyl tyrosinamide (Aminofil®), a novel amino acid derivative shown to increase collagen in aged skin cells; increase hyaluronic acid in skin and cartilage cells in vitro; and increase pro-collagen and GAGs in vivo via histological assessment of human skin biopsies. The daily home peel also contains 10% glycolic acid, an alpha-hydroxy acid (AHA) with clinically proven antiaging benefits for photodamaged skin. This poster presents a summary of a 12-week clinical study evaluating the tolerability and cosmetic effects of the daily home peel in conjunction with a high-strength AHA/Bionic Acid containing regimen.

Study Methodology

Design

A 12 week, Institutional Review Board approved, single center, prospective study with direct comparison to baseline condition.

Population/Inclusion

Caucasian, non-sensitive skinned women, aged 40-60 years, with mild/moderate to marked facial photodamage (including fine lines, wrinkles and/or pigmentation; score of 1.5-3 on 0-4 scale).

Exclusion

Known allergies to skincare products; history of disease or use of medication that could interfere with evaluations; routine use of antiaging topical products, including prescription retinoids within 3 months; hydroxyacids, retinol and other antiaging cosmetics within 2 months; cosmetic procedures (e.g. peels, laser, light treatments, microdendrimer) within 6 months; and pregnancy/breastfeeding.

Duration/Evaluation Time Points

12 weeks with evaluations at weeks 0, 6, 12.

Evaluation Tools

Clinical Measures

Fineline wrinkles, modified pigmentation, skin laxity, large pore size and visual and tactile roughness were graded using a 0-3 scale (none, mild, moderate, severe). Iteration/tolerability parameters such as dryness, erythema, itching, stinging/burning were graded using a 0-3 scale (none, mild, moderate, severe).

Subjective Measures

Self-assessment questionnaires were completed by subjects.

Photography

Standardized digital photographs of faces were taken using the Canfield Omnia camera system.

Statistics

Clinical improvements were compared to baseline at each visit using the Student’s t-test (P<0.05).

Safety

Adverse events were recorded and tabulated.

Test Products

The daily home peel was used in conjunction with a high-strength AHA/Bionic Acid containing regimen. A gradual introduction of the daily home peel was initiated to allow the skin time to acclimate to the regimen. Use of high-strength AHAs can sometimes be associated with the need for further time to acclimate to the regimen.

Product and Usage

**Daily Home Peel**

- NeoStrata® Smooth Surface Daily Peel
  - Two daily; morning and night

**Regimen**

- Cleanser (NeoStrata® Foaming Glycolic Wash)
  - 11% AHA/Bionic Acid
- Day Cream SPF 20
  - 10% AHA/Bionic Acid
  - Once daily in the morning
- Night Cream (NeoStrata® Ultra Smoothing Cream)
  - 10% AHA/Bionic Acid
  - Once daily at night; after application of Daily Home Peel

Key Benefit Ingredients

- 0.5% N-acetyl tyrosinamide (Aminofil®)
- 10% Glycolic acid

Results

Self-Assessment

- Study participants agreed skin is more firm (82%), brown spots improved (88%), pores are less visible (82%) and skin texture and smoothness improved (88%).
- On average, subjects thought the regimen made their skin look younger as early as 3 weeks after baseline.

Clinical Photography

- Digital photography demonstrated obvious antiaging effects including fewer lines and wrinkles, more even pigmentation and increased firmness. (Figures 3-5)

Tolerability

- All subjects used the AHA regimen from weeks 6-12; study participants agreed skin is more firm (82%), brown spots improved (88%), pores are less visible (82%) and skin texture and smoothness are less apparent (88%), skin has better clarity/radiance (91%), fine lines, wrinkles, mottled pigmentation, skin laxity, large pore size and visual and tactile roughness were significantly improved at each time point, (P<0.00).

Clinical Measures

- Subjective measures were further supported by clinical photography as well as self-assessment for firmness, pigment, clarity and texture. The high-strength AHA regimen was tolerated well across all timepoints.

Conclusions

- The regimen of AHA/Bionic Acid products including the daily home peel containing N-acetyl tyrosinamide (Aminofil®) and glycolic acid showed significant firming, skin smoothing and pigmentation-evening benefits.

- Dermatologist grading demonstrated statistically significant improvements in the visual signs of aging; this was further supported by clinical photography as well as self-assessment for firmness, pigment, clarity and texture.

- The high-strength AHA regimen was well tolerated across all timepoints.

- Addition of a daily home peel to a homecare product regimen is an effective antiaging option to complement the benefits between visits to the dermatologist.

References

4. Farris PK, Edison BL, Weinkauf RL, Green BA. A novel, high-strength AHA regimen was tolerated well across all timepoints.