Topical Niacinamide Compared with Topical Clindamycin in the Treatment of Inflammatory Acne Vulgaris

Bas Hamo

Purpose of the study:
To prove that topical Niacinamide provides potent anti-inflammatory activity without the risk of inducing bacterial resistance in the treatment of acne vulgaris.

Method used:
In our double-blind investigation, the safety and efficacy of topically applied 4% Niacinamide was compared to 1% clindamycin gel for the treatment of moderate inflammatory acne vulgaris. Seventy-six patients were randomly assigned to apply either 4% topical Niacinamide (n=38) or 1% clindamycin gel (n=38) twice daily for 8 weeks. Efficacy was evaluated at 4 and 8 weeks using a Physician's Global Evaluation, Acne Lesion Counts, and an Acne Severity Rating.

Results:
After 8 weeks, both treatments produced comparable (P=0.19) beneficial results in the Physician’s Global Evaluation of Inflammatory Acne; 82% of the patients treated with topical Nicacinamide and 68% treated with clindamycin gel were improved. Both treatments produced statistically similar reductions in acne lesions (papules/pustules; -60%, Niacinamide vs. -43%, clindamycin, P=0.168), and acne severity (-52% Niacinamide group vs. -38% clindamycin group, P=0.161).

Conclusions:
These data demonstrate that 4% topical Niacinamide is of comparable efficacy to 1% clindamycin gel in the treatment of acne vulgaris. Because topical clindamycin, like other antimicrobials, is associated with emergence of resistant microorganisms, topical Nicacinamide is a desirable alternative treatment for acne vulgaris.