Timolol for post-acne erythema

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LETTER TO THE EDITOR

Timolol for post-acne erythema

Dear sir,

We read with great interest the article published in *Journal of Cosmetic Dermatology* by Kalantari et al.[1] regarding treatments for post-acne erythema (PAE). One treatment we believe they have overlooked is the use of topical timolol. Timolol is a simple, low-cost treatment with few adverse effects reported in dermatology patients especially when applied topically and mucous membranes are avoided. Through the non-selective blockade of β-adrenergic receptors, timolol suppresses inflammatory cytokines and causes vasoconstriction, all of which alleviates erythema and disease severity in chronic inflammatory skin conditions such as acne and rosacea.[2] In a case report, Afra and colleagues investigated the impact of ophthalmic solution of topical timolol maleate 0.5% when applied once daily.[3] Following a 12-week treatment period, a significant clinical improvement of the post-inflammatory erythema of acne was observed on dermoscopic evaluation with only shallow rolling scars left but no pigmentation. Importantly, no adverse effects were noted. Moreover, Al Mokadem et al.[4] suggested adding topical timolol to the standard treatment protocol of acne after they observed improvement in acne comedones and resistant inflammatory erythema. In a multicenter study over 8 weeks, 42 patients with mild acne (measured via Global Acne Grading System) and 16 patients with moderate acne applied 4–8 drops of topical timolol maleate 0.5% daily demonstrated mean percentage improvement in comedones, papules, and pustules of 28.17%, 26.81%, and 16.05%, respectively. The adverse effects were tolerable with dryness being the most frequent complaint. Finally, timolol has been suggested to be beneficial in the treatment of erythematotelangectatic rosacea following a split-face, randomized trial of 8 patients over 16 weeks, in which 0.5% gel-forming solution was used twice daily.[5]

CONFLICT OF INTEREST STATEMENT

None.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

CONSENT FOR PUBLICATION

All authors have approved this final submitted version of the manuscript and consent to its submission for consideration of publication.

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