

Innovations

Xylometazoline in the treatment of post-acne macular erythema

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PROBLEM

Post-acne macular erythema refers to the localized areas of persistent skin erythema that occurs as acne lesions resolve.^[1] This is more commonly seen following inflammatory acne and in lighter Fitzpatrick skin types. It is a common worrisome complication and can have significant psychological impact.

The pathogenesis is initially due to vasodilation but the persistent erythema seen in many cases is due to the cascade of inflammatory events that follow acne vulgaris and neovascularization.^[2] It is considered a sign of ongoing inflammation and is important to initiate treatment early due to the chances of it resulting in scarring.^[3] The existing therapeutic options include topicals such as tacrolimus, brimonidine, niacinamide, Vitamin C, and tranexamic acid and procedural treatments such as microneedling, intense pulse light, and lasers. However, all these may be associated with certain drawbacks ranging from partial response to cost to availability. Hence, arose the need for a versatile, inexpensive, and easily available molecule with good efficacy. We selected topical xylometazoline drops for the same.

SOLUTION

Xylometazoline is an imidazoline derivative. It is easily available as over the counter nasal drops and sprays. It is an alpha adrenergic receptor agonist resulting in vasoconstriction. It is routinely used



Figure 1: (a) Baseline photo of patient 1, (b) Post 1.5 months photo of patient 1, (c) Post 3 months photo of patient 1.

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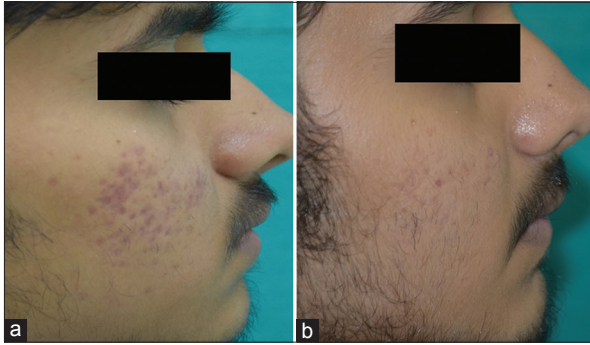


Figure 2: (a) Baseline photo of patient 2, (b) Post 15 days photo of patient 2.

as a nasal decongestant and for the control of epistaxis. Ten patients of significant post-acne macular erythema were treated with topical xylometazoline. Two drops were applied over each cheek followed by gentle massaging twice daily. Topical 1% clindamycin phosphate gel was given in case the patient developed breakthrough acne. Assessment was done by taking clinical photographs using Nikon digital camera D5300 at baseline and every 15 days thereafter. Patients showed complete resolution of erythema as early as 2 months up to 4 months after starting xylometazoline [Figures 1 and 2]. Follow-up at 5th months after stopping xylometazoline did not show signs of relapse. None of the patients have reported any side effects till date. Hence, xylometazoline is a safe, inexpensive, easily available, easy to apply, and efficacious treatment option for post-acne macular erythema. Absence of a control group is a limitation of our study.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

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