

Metasone furoate induced acneiform eruption**M. Ravishankar^{1*}, S. Shwetha², G. Deepika²**¹Department of Pharmacology,
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use, distribution, and
reproduction in any medium,
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properly cited.**ABSTRACT**

Acne is the chronic inflammatory disease of the pilosebaceous unit, characterized by the formation of comedones, erythematous papules and pustules. Steroid induced acne is an acneiform eruption characterized by sudden onset of follicular papules and pustules shortly after starting topical or oral corticosteroid. Here, we report a case of a 25-year-old female patient who presented herself to the Dermatology out-patient department with the complaints of acne all over the face after the application of mometasone furoate ointment.

Keywords: Acne, Topical steroid, Mometasone furoate ointment**INTRODUCTION**

Acne is the chronic inflammatory disease of the pilosebaceous unit, characterized by the formation of comedones, erythematous papules and pustules. Steroid induced acne is an acneiform eruption characterized by sudden onset of follicular papules and pustules shortly after starting topical or oral corticosteroid.¹ Mometasone furoate is a glucocorticosteroid, which is a synthetic 16 α -methyl analog of beclomethasone. It is used topically to reduce inflammation of skin or airway conditions such as atopic dermatitis, allergic dermatitis, contact dermatitis, plaque psoriasis.² There is evidence of the association of use of mometasone furoate and adverse effect like acneiform eruption.³ According to a clinical study involving 319 patients, incidence of adverse drug reactions (ADR) with mometasone furoate cream was 1.6%.⁴

CASE REPORT

A 25-year-old female patient presented to Dermatology outpatient department (OPD) with complaints of acne all over the face since 7 days. Patient gave a history of application of mometasone furoate ointment over face since 1 month, twice a day. The cream was given by a local Pharmacist when asked for fairness cream. After applying the medication for 21 days, the lady developed acneiform eruptions, one after the other with worsening of the eruptions with progression of time. Seven days later on, the patient came to the Dermatology OPD with the complaints of pustular acneiform eruptions throughout the face. There was no history of any other drug intake or history of fever or any illness. General physical examination and systemic examinations were normal. The case was diagnosed as mometasone induced acneiform eruptions (Figure 1). Mometasone ointment was

discontinued, and the patient was treated in the same line as acne. The patient was put on tablet doxycycline 100 mg once at night for 3 weeks, clindamycin topical gel on the eruptions twice a day, ultraviolet protective sunscreen lotions before exposure to the sunlight, adapelene gel thrice daily and Supportive measures like avoidance of sun exposure.

Improvement was noted. Acne was reduced by drying and scaling of skin. Rechallenge was not done.

DISCUSSION

There is common occurrence of cutaneous adverse reactions with steroids. Mometasone furoate ointment, 0.1%, is a medium potency corticosteroid indicated for the relief of the inflammatory and pruritic manifestations of corticosteroid-responsive dermatoses. In terms of steroid strength, it is more potent than hydrocortisone, and less potent than dexamethasone. Mometasone is available as a cream or ointment for skin conditions, as a nasal spray and as a dry powder inhaler for respiratory conditions, and as an ointment for scalp conditions.² It is also available as an ear drop for the treatment of otitis externa in veterinary practice.

It reduces inflammation by reversing the activation of inflammatory proteins, by activating the secretion of anti-inflammatory proteins, by stabilizing cell membranes and by decreasing the influx of inflammatory cells. In controlled clinical studies involving 812 patients, the incidence of adverse reactions associated with the use of mometasone furoate ointment was 4.8%.⁵ Reported reactions included burning, pruritus, skin atrophy, tingling/stinging, and furunculosis.

The following additional local adverse reactions have been reported infrequently with topical corticosteroids, but may occur more frequently with the use of occlusive dressings. These reactions are listed in an approximate decreasing order of occurrence: irritation, dryness, folliculitis, hypertrichosis, acneiform eruptions, hypopigmentation, perioral dermatitis, allergic contact dermatitis, secondary infection, striae, and miliaria.

Sex factor is highly significant, and the female sex is nearly 4 times prone to steroid induced acne than the male sex.⁶ The route of steroid administration significantly affects the occurrence of steroid acne in which those who used topical steroid are 3 times more prone to steroid acne than those who used systemic steroid.

According to our observation, unfortunately, many women apply potent steroids to their face under the mistaken belief that this wonder drug will improve the complexion. This behavior of the continuous efforts of female to get better look render female sex more prone to steroid acne than males.



Figure 1: Mometasone furoate cream induced acneiform eruptions.

In this case, causality assessment using Naranjo scale showed that mometasone furoate was the definite cause for the ADR (score 9).

CONCLUSION

Topical steroids' availability as over the counter drugs and self-prescription of steroids are fundamental factors in the increasing problem of injudicious use of topical steroids.

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