

ERYTHEMA MULTIFORME FOLLOWING TOPICAL MINOXIDIL

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Erythema multiforme following application of minoxidil solution for the treatment of androgenetic alopecia is reported in a male. Recurrence of the eruption following reapplication of minoxidil solution as well as after oral administration of minoxidil tablets confirmed the aetiology. Patch test with minoxidil was negative.

Key Words : Minoxidil, Erythema multiforme

Introduction

Topical minoxidil is now a days commonly used in the treatment of androgenetic alopecia and alopecia areata. Several studies have proved its efficacy when used as 2 percent solution. Absorption of minoxidil from the skin surface is minimal,¹ and hence the systemic complications after its use are only rarely seen. We report a patient who developed erythema multiforme following topical therapy with minoxidil.

Case Report

A 34-year-old male who had been applying 2 per cent solution of minoxidil on the scalp since 2 weeks for the treatment of androgenetic alopecia, developed multiple erythematous papules, plaques and iris-type of lesions bilaterally on the forearms, legs, thighs, palms and soles associated with fever, malaise, arthralgia and headache. The scalp skin where he applied minoxidil appeared normal. There was no history of using any other drug- systemic or topical. Application of minoxidil was discontinued

and he was treated with oral antihistamine and corticosteroid which was gradually tapered off and stopped on the seventh day. Lesions subsided completely and there was no recurrence. After one month he again applied 1 ml of minoxidil solution on the scalp which was followed 12 hours later by development of an eruption similar to that occurred previously. This time he developed bullous and crusted lesions also on the lips ; the oral cavity remaining unaffected. The eruption was treated again with corticosteroid and antihistamine. All systems were clinically normal.

Routine laboratory tests on blood and urine, blood sugar, blood urea and x-ray of the chest were normal. Patch test with minoxidil 2 per cent solution was negative. Later he was given minoxidil tablets 10 mg daily orally for 3 days, there were no adverse cutaneous or systemic effects.

Discussion

Cutaneous side effects of topical minoxidil are usually minimal and include local irritation, allergic contact dermatitis, photocontact dermatitis and hypertrichosis.²⁻⁵ Severe cutaneous reactions such as Stevens-Johnson syndrome though rare, have been reported.⁶ Morphology of the skin

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lesions, their distribution and associated features of toxicity suggested a diagnosis of erythema multiforme in our patient. Recurrence of the skin lesions following topical application, as well as after oral administration of minoxidil confirmed that minoxidil was the causative agent for the eruption. Propylene glycol, the vehicle for minoxidil may rarely cause hypersensitivity reaction.⁵ Development of the eruption following oral intake of minoxidil- that doesn't contain propylene glycol-excluded this possibility. Absence of dermatitis on the scalp and a negative patch test excluded allergic contact dermatitis to minoxidil.

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