

Contact Dermatitis Masquerading as Folliculitis Decalvans: Methylisothiazolinone Strikes Again!

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PRECÍS

Methylisothiazolinone (MI) is currently a leading cause of contact dermatitis,^{1–3} and can present with unusual clinical manifestations.⁴

DISCUSSION

An atopic male patient in his 40s had been experiencing an itchy and burning dermatosis on his scalp for nearly 1 year presenting follicular pustules and crusts, tufted hairs, and subtle areas of cicatrization (Fig. 1A). Bacterial swabs had repeatedly shown the growth of *Staphylococcus aureus*, and because of a clinical suspicion of folliculitis decalvans, he had received treatments with topical corticosteroids and oral antibiotics, all with only partial and temporary relief. Upon referral, clinical examination showed weeping erythematous lesions with a sharp demarcation on the scalp along with infiltrated red lesions unevenly distributed over the face (Fig. 1B). Interestingly, the dermatosis would burst out in flares, thereby occasionally extending to both arms and, sometimes, even producing a burning sensation of his mouth and nose mucosa. A skin biopsy taken from the scalp, to differentiate between folliculitis decalvans and a superinfected (contact) dermatitis, was in favor of the latter demonstrating, however, a normal epidermis and a remarkable dermal lymphocytic infiltrate accompanied by eosinophils. Patch tests were performed on the upper back with the Belgian baseline series and a cosmetic series, both from Chemotechnique (Chemotechnique Diagnostics, Vellinge, Sweden), and with an additional series of allergens composed by the Belgian Contact and Environmental Dermatitis Group. The tests were occluded for 2 days, and results were read at days 2 and 4 according to International Contact Dermatitis Research Group guidelines. At day 4, a strong reaction (2+) was observed to MI of 500 and 2000 ppm, both in aqueous solution. The mixture of methylchloroisothiazolinone-MI of 100-ppm aqueous solution



Figure 1. Follicular crusts, tufting, and cicatrization on the scalp (1A) along with red, infiltrated lesions on the face (1B).

showed only a 1+ reaction. A doubtful reaction (+?) was recorded for the preservative octylisothiazolinone (OIT) of 1000 ppm pet. No reaction was observed to benzisothiazolinone. After careful examination of the patient's own personal care products, MI was present in a hair gel (Taft hair gel; Schwarzkopf, Henkel, Düsseldorf, Germany) that the patient confirmed he had been using regularly during the past year. After stopping its use, his skin problems gradually subsided and did not recur.

We are actually confronted with an escalating MI epidemic, which mainly causes facial and eyelid dermatitis attributable to leave-on cosmetics.³ We here describe a case of contact allergy caused by MI in a hair gel with a clinical picture mimicking folliculitis decalvans, the subtle cicatrization probably being the result of extensive scratching. The flares of the dermatitis, its sharp demarcation, the spreading to the face and arms, and the dermal lymphocytic infiltrate, the latter also being reported,⁴ all point toward contact dermatitis. Mucosal complaints, as present in this case, might be underestimated features of isothiazolinone allergy. Possible cross-reactivity to OIT, structurally the isothiazolinone most related to MI, has been observed,³ although, in the present case, the used test concentration for OIT only showed a doubtful reaction.

ZEBRA

Atypical scalp dermatitis with dermal lymphocytic infiltrates should alert the physician to the possibility of allergy to isothiazolinones in cosmetics.

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