Contact Sensitization to Emulsifying Agents: An Underrated Issue?

Monica Corazza czm@unife.it, Annarosa Virgili, Michela Ricci, Anna Bianchi, and Alessandro Borghi

Corazza M, Virgili A, Ricci M, Bianchi A, Borghi A. Contact sensitization to Emulsifying Agents: An Underrated Issue? Dermatitis 2016; 27:276–81.

Abstract

Background

The evidence on the safety of topical preparations containing emulsifiers is limited.

Objectives

The aims of the study were to assess (1) the prevalence of sensitization to some emulsifiers commonly found in topical products, (2) the sensitization to emulsifiers in relation to sex, age, and predisposing factors, and (3) the frequency of concomitant sensitization to other common allergens.

Methods

All consecutive patients presenting to the Allergy Unit of our Dermatological Department for allergological investigation were enrolled. All patients were patch tested with the Italian Società Italiana di Dermatologia Allergologica Professionale ed Ambientale baseline series and an additional emulsifiers series. Doubtful patch test reactions were not considered.

Results

Of 310 patients, 50 (16%) were sensitized to emulsifiers with 72 positive reactions. Lauryl polyethylene glycol/polypropylene glycol-18/18 methicone gave 26 positive reactions, glyceryl oleate 19, myristyl alcohol, and Amerchol L101 11. Concomitant sensitization to emulsifiers was found in 16 patients. Patients allergic to emulsifiers showed concomitant allergic reactions to allergens commonly found in cosmetics. No significant differences by sex, age, atopic diathesis, and clinical pattern at presentation were noticed.

Conclusions

Contact allergy to emulsifiers is more frequent than reported. Patients allergic to emulsifiers show frequent positive patch tests to other constituents of cosmetics and topical products.