Case Report

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Topical medicament allergy: the importance of patch testing

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ABSTRACT
A 41-year-old woman with a 6-year history of mild psoriasis presented with a rash under her breasts. She was prescribed Trimovate cream (GlaxoSmith Kline) and had a florid weeping eczema within 48 hours of application. This settled with the withdrawal of Trimovate. Contact dermatitis is type IV allergy and usually appears within 2-3 days after contact with an external allergen. Detection of the allergen, or allergens, is important, as avoidance results in resolution of the eczema. Our patient was patch tested and showed positives to three components of Trimovate; cetearyl alcohol, sodium metabisulphite, and clobetasone butyrate. These are important allergens to identify, because they are also present in other products. Clobetasone butyrate is often used in facial and flexural psoriasis. Cetearyl alcohol is particularly significant, as it is found in many products including commonly used moisturizers such as Diprobase (MSD), Cetraben (Genus) and Epaderm (Mölnlycke) cream, and most steroid creams. Our patient highlights the fact that is insufficient to simply advise a patient to avoid the topical medicament that has caused a reaction. Patch testing is necessary to identify which components the patient is allergic to, so that they can be avoided in all products. This is of particular significance for our patient given her history of psoriasis, as she will likely require moisturizers and topical steroid preparations in the future. Since she began avoiding these allergens, she has had no recurrence of eczema. To conclude, GPs should consider sending their patients with contact dermatitis for patch testing, as the identification of all allergens is valuable to management.
Keywords: patch testing, contact dermatitis, concomitant sensitivity, Trimovate cream, sodium metabisulphite, clobetasone butyrate, cetearyl alcohol.

Case Report

A 41-year-old woman with a 6-year history of mild psoriasis presented with a rash under her breasts. The differential diagnosis included flexural psoriasis, an allergy to the nickel in her under wired bra, and intertriginous dermatitis (moisture-associated skin damage). She was prescribed Trimovate cream (GlaxoSmith Kline) and developed a florid weeping eczema within 48 hours of application (Figure 1). The eczema settled with the withdrawal of Trimovate and application of Betnovate RD cream (GlaxoSmith Kline). The history was very suggestive of a contact dermatitis to Trimovate cream.

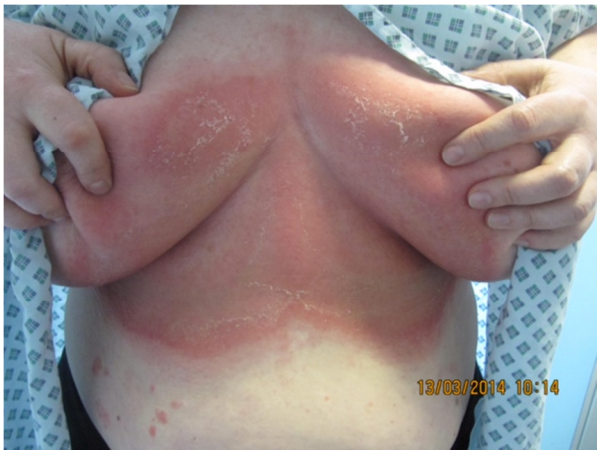

Figure 1 showing eczema

She was referred to the Dermatology department and was patch tested to the European standard, medicament and steroid batteries. She had a number of positives including cetearyl alcohol, sodium metabisulphite, and clobetasone butyrate. These are all components of Trimovate. She was given advice sheets on all her allergens and on avoiding them she has had no recurrence of eczema.

Discussion

Contact dermatitis is a type IV allergy and usually appears within 2 to 3 days after contact with an external allergen. This case is likely to be an example of concomitant sensitisation, where one sensitivity facilitates the acquisition of another sensitivity to a chemically unrelated ingredient within a product. Whilst there has been a previous case report of concomitant sensitivity to sodium metabisulphite and clobetasone butyrate in a patient using Trimovate cream,[1] this is the first report of a patient reacting to three of the ingredients found in Trimovate - sodium metabisulphite, clobetasone butyrate, and cetearyl alcohol. Allergy to clobetasone butyrate is rare, with only 5 previously reported cases.[1, 2, 3] Allergy to sodium metabisulphite is not uncommon, producing a positive reaction in approximately 4% of patients who are patch tested.[4, 5] Allergy to cetearyl alcohol is also rare, with one study estimating the incidence of positive reactions to be 0.8% among 3062 patients that were patch tested.[6]

Detection of the allergen, or allergens, is important, as avoidance results in resolution of the eczema. Our patient highlights the fact that it is insufficient to simply advise a patient to avoid the topical medicament that has caused a reaction. Ideally, patients with a topical medicament allergy should be patch tested to identify which components the patient is allergic to, so that they can be avoided in all products. In this case, in addition to Trimovate, there are a number of

other products that our patient will now avoid. This is of particular significance in view of her history of psoriasis, for which she has used moisturizers and topical steroid preparations in the past, and will likely need again in the future. Clobetasone butyrate is often used in facial and flexural psoriasis. Cetearyl alcohol is a particularly important allergen to identify, as it is found in many products including a number of commonly used moisturizers such as Diprobase (MSD), Cetraben (Genus) and Epaderm (Mölnlycke) cream, and most steroid creams although not steroid ointments. Our patient was therefore advised to use only steroid ointments and has had no recurrence of the contact dermatitis. To conclude, GPs should consider sending their patients with contact dermatitis for patch testing, as the identification of all allergens is valuable to management.

Competing Interests
None declared
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