

CONTACT POINT

Allergic contact dermatitis caused by mupirocin and pimecrolimus

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Mupirocin and pimecrolimus are rare contact allergens. We present a case of clinically relevant contact allergy to both mupirocin and pimecrolimus.

CASE REPORT

A 31-year-old female presented with a 2-year history of pruritic lip dermatitis. Physical examination showed a 2-mm circumferential rim of erythema and oedema on the upper and lower lips. Previous therapies included pimecrolimus cream (Elidel) and mupirocin ointment. The patient was patch tested with the North American Contact Dermatitis Group screening series, in addition to supplemental series and personal products. On patch test day 5, clinically relevant positive reactions included weak (+) positive reactions to 2 different mupirocin 2% ointments (Taro—clinic product and Glenmark—patient's product) and pimecrolimus 1% cream (Valeant—patient's product) (Figure 1A-C).

The mupirocin ointment formulations consisted of only mupirocin and polyethylene glycol. The patient did not react to polyethylene glycol 100%, indicating contact allergy to mupirocin. Ingredients in

pimecrolimus cream with negative patch test results included benzyl alcohol (10% softisan 649), cetearyl alcohol (20% pet.), and propylene glycol (30% and 100% aq.). A repeated open application test with pimecrolimus cream (applied twice daily to the antecubital fossa) resulted in a pruritic eczematous rash after 3 days (Figure 1D). Patch testing with a pimecrolimus-free vehicle containing all inactive components (supplied by Valeant) gave negative results, consistent with contact allergy to pimecrolimus. Follow-up at 3 months indicated significant clinical improvement with avoidance.

DISCUSSION

Mupirocin is a topical antibiotic produced by *Pseudomonas fluorescens*. It is a rare allergen, and there are only 2 reported cases of mupirocin contact allergy.^{1,2} Pimecrolimus is the immunosuppressive 33-epi-chloro derivative of the macrolactam ascomycin. This calcineurin inhibitor is a rare allergen, and there are only 3 reported cases of pimecrolimus contact allergy.³⁻⁵ We report a case of

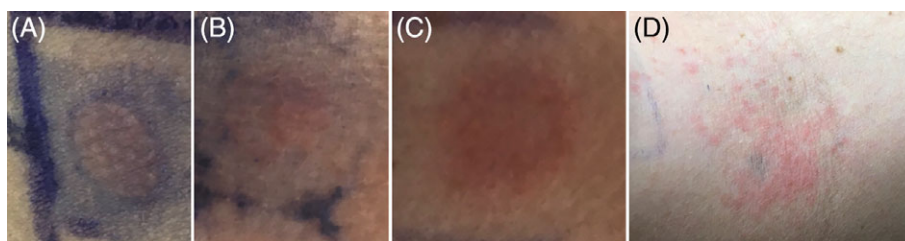


FIGURE 1 (A-C), Patch test on day 5 showed mild (1+) reactions to (A) mupirocin 2% ointment (Taro), (B) mupirocin 2% ointment (Glenmark), and (C) pimecrolimus 1% cream (Valeant). (D), Eczematous reaction resulting from a repeat open application test with pimecrolimus 1% cream for 3 days

allergic contact dermatitis caused by both mupirocin and pimecrolimus. This case highlights these rare allergens, and underscores the importance of patch testing with patients' own products.

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CONFLICT OF INTEREST

The authors declare no potential conflict of interests.

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