

Photoallergy to promazine hydrochloride

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Cutaneous side effects and phototoxic properties of neuroleptic drugs are well known (1, 2). Photo-induced reactions may often occur in patients treated with these drugs but, to our knowledge, photoallergy to promazine has never previously been described.

Case Report

A 79-year-old non-atopic man presented with an eczematous eruption on the face, arms and back of the hands associated with itching and burning (Fig. 1).

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The history showed that the reaction had appeared in September ~2 weeks after the start of a new treatment with Talofen[®] oral drops (promazine hydrochloride, 50 mg daily) and Trittico[®] tablets (trazodone hydrochloride, 100 mg daily) prescribed by his physician to treat Alzheimer's disease.

In view of the clinically suspected photodermatitis, the use of Talofen[®] and Trittico[®] was immediately stopped. One month after the resolution of dermatitis, which was achieved with 2 weeks of oral prednisolone, starting from 25 mg daily and then tapered, and topical clobetasole dipropionate (twice daily), we performed patch tests with the SIDAPA (Italian Society of Allergological, Occupational and Environmental Dermatology) baseline series (Euromedical, Calolziocorte, LC, Italy), and patch tests and photopatch tests with the European photopatch baseline series supplemented with Talofen[®] 5% pet. and



Fig. 1. Eczematous eruption on the face and positive reaction to Talofen® (photopatch test, reading on day 7).

Trittico® 5% pet. Patch and photopatch tests with Al Test® (Euromedical) on Scanpor® tape (Norgesplaster, Vennesla, Norway) were applied on the back and left in occlusion for 2 days. Photopatch tests were carried out by applying the allergens on one side of the back, taking the Scanpor® tape off after 48 h, and exposing them to ultraviolet (UV) A at a dose of 5 J/cm² (UV 801 KL, Waldmann Lichttechnik, Germany); the opposite

side of the back was covered with a black cloth. Readings were performed on day (D) 2, D4, and D7, according to ESCD guidelines (3). The patch tests gave negative results, whereas photopatch tests showed a positive reaction to promethazine hydrochloride 1% pet. (++) on D2 and D4), and increasingly positive reactions to Talofen® (+ on D2; ++ on D4 and D7) (Fig. 1). Subsequently, photopatch tests were performed with promazine hydrochloride 0.1% and 1% pet., and gave positive results in both cases (++) on D2 and D4). Ten healthy volunteers were patch and photopatch tested with Talofen® 5% pet. and promazine hydrochloride 1% pet., with negative results.

Discussion

We report a case of photoallergy to promazine hydrochloride, a member of the phenothiazine class of antipsychotics, in a patient affected by Alzheimer's disease. Phenothiazines are known causes of phototoxic reactions, and allergic and photoallergic dermatitis; often showing cross-reactions in the latter case (4). The best-known photosensitizing phenothiazines are promethazine and chlorpromazine (5), whereas promazine has never previously been described as a photosensitizing agent. Phenothiazines are also present as antihistamines in several topical products that have been withdrawn in many countries owing to their strong sensitizing potential, but are still used in Italy.

A closer history showed that, several times in the past, our patient had used a topical product containing promethazine to treat mosquito bites. It may be that he developed sensitization to the medication and thereby photoallergy to promazine because of a cross-reaction between these drugs. Alternatively, he might have become sensitized to promazine because of repeated oral administration of Talofen® drops. On follow-up, he has had no recurrence of dermatitis, avoids phenothiazine drugs, and applies sunscreens daily.

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