Contact photoallergy to isothipendyl chlorhydrate (Apaisyl gel®)

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Introduction: Whereas some phenothiazines are common photoallergens (chlorpromazine, promethazine, chlorproethazine), we report the first case of contact photoallergy to isothipendyl chlorhydrate, active ingredient of an anti pruriginous gel (Apaisyl gel®), belonging to the chemical class of azaphenothiazines.

Case report: A 56-year-old woman having a chronic eczema on the dorsum of the right foot due to a venous deficiency and exacerbated during the summer 2009 presented in September 2009 an eczema on the sun-exposed areas (face, neck, nape, forearms) evolving to an erythroderma more severe on the sun exposed areas within 2 months. There was no drug intake. She was a farmer and handled an insecticide, the deltamethrine added to a mixture of grains of wheat and barley turned into a volatile flour (cattle's food). The diagnosis of contact photoallergy to deltamethrine was evoked. Phototesting (materials: Dermolum UM-Müller® and UVA 700-Waldmann® lamp) was performed in January 2010: the polychromatic (UVB, UVA, visible) minimal erythema dose was decreased to less than 50 mJ/cm² (normal: superior or equal to 400), the simple UVA phototest (13 J/cm²) was positive at 24 hours (h) with an erythema. The photopatch tests performed with the French Society of Photodermatology standard series including 23 photoallergens (antiseptics, cosmetics, vegetal products, promethazine, chlorpromazine, ketoprofen, 11 sunscreens) and with deltamethrine 1% petrolatum showed a contact photoallergy to chlorpromazine. The patient informed by her chemist of the various topics containing a phenothiazine, recognized the Apaisyl gel® (isothipendyl chlorhydrate) that she applied on her foot during the summer 2009 to decrease the pruritus. The UVA (5 J/cm²) photopatch test performed with Apaisyl gel® was strongly positive (++ 24h, +++ 48h) and was negative in a control unirradiated patch test at 48h and at 72h. After stopping to use Apaisyl gel® in April 2010, the lesions disappeared within 1 month with a symptomatic treatment (oral antihistamine, local corticosteroid) and a strict external photoprotection.

Discussion: In photoallergic reactions, there are cross-reactions between the molecules of the same chemical class. In our case, the discovery of a chlorpromazine contact photoallergy was the reason for questioning the patient again, leading us to the use of Apaisyl gel® on her foot 2 months before the appearance of the erythroderma.

Conclusion: We report the first case of contact photoallergy to isothipendyl chlorhydrate and this case report confirms the need to keep the phenothiazines (chlorpromazine, promethazine) in the photopatch test standard series as a diagnostic marker of a phenothiazine photoallergy.

Keywords: isothipendyl chlorhydrate, phenothiazone, contact photoallergy