

A.V. Alvarado,^{a,*} J.J. Dávila-Rodríguez,^a B. Vélez,^a
M. Montenegro-Zumárraga^b

^a Servicio de Dermatología, Hospital San Francisco de Quito, Quito, Ecuador

^b Servicio de Anatomía Patológica, Hospital San Francisco de Quito, Quito, Ecuador

* Corresponding author.

E-mail address: avalvaradomd@gmail.com (A.V. Alvarado). 1578-2190/

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Contact Dermatitis Due to Black Pepper Extract Used to Treat Vitiligo[☆]



Eccema de contacto por extracto de pimienta negra como tratamiento de vitiligo

To the Editor:

Vitiligo is a disease with an estimated worldwide prevalence of between 0.06% and 2.28%.¹ Very often, the appearance of characteristic achromic lesions has a marked psychological effect, to the extent that patients end up trying various treatments with the aim of repigmenting the lesions.^{2,3} A new class I topical health care product—Pigmerise 20% in Fitalite—was recently marketed for the treatment of vitiligo.

We report 3 clinical cases of patients with vitiligo and allergic contact dermatitis to this new product. The patients (2 women, 1 man; age, 37-51 years) had had vitiligo for several years and had received topical treatment with corticosteroids, tacrolimus 0.1%, and/or narrowband UV-B therapy. They all experienced a local eczematous reaction at the site of application between 3 weeks and 2 months after first use. The use test with the commercial product yielded a positive result in all 3 cases. The patients subsequently underwent patch testing with the standard series of the Spanish Contact Dermatitis and Skin Allergy Research Group (GEIDAC) and with the 2 components of the product: the active ingredient, Pigmerise, diluted to 1% and 0.4% in white petrolatum; and its vehicle, the hydrophilic gel cream Fitalite. Both components were supplied by the company

sales representative. In all 3 cases, the results were positive at 48 hours and at 96 hours with the black pepper extract at both concentrations (Pigmerise, 0.4% and 1%) and negative with Fitalite (Fig. 1). Test results were positive for 2 of the patients with the Spanish standard series, albeit without present relevance (Table 1). Furthermore, patient 2 experienced a reactivation phenomenon during the patch tests, with the appearance of eczematous plaques on the antecubital skinfolds and axilla, where the product had been applied. Patch testing with 25 healthy controls yielded negative results.

The use of plant-derived products for both cosmetic and medicinal purposes has increased considerably in recent years. Evidence from clinical trials on the safety and efficacy profile of these products before marketing is generally lacking. The use of plant-derived products is not free of risks, and topical application can cause various types of local reaction, the main ones being irritant contact dermatitis, allergic contact dermatitis, contact urticaria, photoaggravated eczema, and phototoxic reactions.⁴ The recently marketed Pigmerise 20% in Fitalite for treatment of vitiligo contains an active ingredient composed of a natural phytoextract of liquid oleoresin derived from black pepper extract (*Piper nigrum* L or piperine). This is formulated at 20% in a hydrophilic gel cream with high concentrations of triglycerides of linoleic and oleic acid known as Fitalite. The compound is thought to act by activating proliferation of melanocytes, as previously shown in vitro.⁵ However, we were unable to find articles or other publications with safety and efficacy data for this product: since it is marketed as a class I product, pharmacovigilance studies are not necessary.

The literature to date does not contain published cases of allergic contact dermatitis caused by black pepper extract



Figure 1 Results of Allergic Contact Tests for Patients 1 and 3 at 96 h for Pigmerise 0.4 and 1%.

[☆] Please cite this article as: García-Zamora E, Fuente EGdl, Miñano-Medrano R, Gutiérrez-Pascual M, López-Estebanz JL. Eccema de contacto por extracto de pimienta negra como tratamiento de vitiligo. *Actas Dermosifiliogr.* 2019;110:331–332.

Table 1 Demographic Characteristics and Results of Allergic Contact Tests for the 3 Patients.

| | Sex | Age | Use Test | Patch Tests (Pigmerise 0.4 and 1%) | | Spanish Standard Series |
|---|--------|-----|----------|------------------------------------|------|--|
| | | | | 48 h | 96 h | |
| 1 | Female | 51 | + | + | ++ | — |
| 2 | Female | 37 | + | ++ | + | Nickel (+++), Thiomersal (++) |
| 3 | Male | 45 | + | ++ | ++ | p-tert-Butylphenol-formaldehyde resin (++) |

(piperine); therefore, the 3 cases we report are the first cases of allergic contact dermatitis to Pigmerise. The cases highlight the need to establish strict epidemiological vigilance, in which the dermatologist plays a key role by identifying such reactions, especially those associated with topical products, and reports confirmed cases to the Spanish Agency of Medicines and Medical Devices.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Acknowledgments

We are grateful to Yolanda Pérez Serna and Natalia Bueno Betes for their help in the performance of the patch tests.

Bibliografía

- Morales-Sánchez MA, Vargas-Salinas M, Peralta-Pedrero ML, Olgún-García MG, Jurado-Santa Cruz F. Impacto del vitiligo en la calidad de vida. *Actas Dermosifiliogr.* 2017;108:637–42.

- Morrison B, Burden-The E, Batchelor JM, Mead E, Grindlay D, RatibS. Quality of life in people with vitiligo: A systematic review and meta-analysis. *Br J Dermatol.* 2017;177:e338–9.
- Boniface K, Seneschal J, Picardo M, Taïeb A. Vitiligo: focus on clinical aspects, immunopathogenesis and therapy. *Clin Rev Allergy Immunol.* 2018;54:52–67.
- Mortimer S, Reeder M. Botanicals in dermatology: Essential oils, botanical allergens and current regulatory practices. *Dermatitis.* 2016;27:317–24.
- Lin Z, Liao Y, Venkatasamy R, Hider RC, Soumyanath A. Amides from *Piper nigrum* L. with dissimilar effects on melanocyte proliferation in-vitro. *J Pharm Pharmacol.* 2007;59:529–36.

E. García-Zamora,* E. Gómez de la Fuente, R. Miñano-Medrano, M. Gutiérrez-Pascual, J.L. López-Estebanz

Servicio de Dermatología, Hospital Universitario Fundación Alcorcón, Alcorcón, Madrid, Spain

* Corresponding author.

E-mail address: garciazamoraelena@gmail.com

(E. García-Zamora).

1578-2190/

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Porokeratosis-Like Grover Disease: More Than an Acantholytic Pattern[☆]



Enfermedad de Grover tipo poroqueratósico: más allá de un patrón acantolítico

To the Editor:

For many years Grover disease (GD) was classified as an acantholytic and transient dermatosis. It is now known that GD is not necessarily transient¹ and can give rise to several different histological patterns in addition to the 4 classical acantholytic patterns (Hailey-Hailey, Darier-like, spongiotic, and pemphigus-like).^{2,3} Forms of GD with nonclassical

histological patterns described in recent years include dysmaturative, lichenoid, vesicular, and porokeratotic forms,² a lentiginous form,⁴ and even a pseudoherpetic form.⁵ A common feature of all these forms is that acantholysis and dyskeratosis may not constitute the main clinical sign, may be focal, or may even be absent,² complicating histological diagnosis.

Importantly, in most cases these polymorphic histological findings are not associated with major clinical variability. Therefore, correlation of clinical and histological findings is fundamental, especially in early lesions, in order to establish an accurate diagnosis.^{2,4}

Case Description

A 53-year-old man with no known underlying disease presented pruritic, papule-like lesions on the upper thorax, axillae (Fig. 1), and pubis that had appeared 10 years earlier. The lesions worsened in response to exposure to heat and sweating.

[☆] Please cite this article as: Montoya C, Arias LM, Salazar M, Flórez HA. Enfermedad de Grover tipo poroqueratósico: más allá de un patrón acantolítico. *Actas Dermosifiliogr.* 2019;110:332–334.