

Allergic contact dermatitis to resveratrol and *Scutellaria baicalensis* root extract in a cosmetic product

Antoine Badaoui

Department of Dermatology, Military Teaching Hospital, St Mandé, France

Correspondence

Antoine Badaoui, 14 Rue de Chateaudun, 75009 Paris, France.

Email: dr.antoine.badaoui@gmail.com

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We report the second case of allergic contact dermatitis caused by resveratrol (CAS no. 501-36-0), and *Scutellaria baicalensis* root extract (CAS no 94279-99-9), both antioxidants, contained in the same cosmetic.

CASE REPORT

A 37-year-old woman with no past medical history, reported a papular and vesicular eruption of the face and neck, with itchy sensations, 48 h after the application of a new facial cream: Resveratrol BE cream (Skinceuticals) (Figure 1). Patch tests were performed with the European baseline and cosmetic series (Chemotechnique Diagnostics), and with the Resveratrol BE cream 'as is'. Patch test chambers used were IQ ultra (Chemotechnique Diagnostics), fixed with Hypafix (BSN Medical) for 48 h. Readings, performed on Day (D) 2 and D4 according to ICDRG criteria,¹ showed a positive reaction to Resveratrol BE cream (++) on D4 and also to chromium (++) and to para-tertiary-butyl phenolformaldehyde resin (++) with a past relevance. The ingredients of this cream, provided by the manufacturer, were subsequently patch tested and showed a positive reaction (++) to resveratrol 1% aq. and *S. baicalensis* root extract 0.5% aq. (++) on D4 (Figure 2). Patch tests with resveratrol 1% aq. and *S. baicalensis* root extract 0.5% aq. were subsequently performed in four control healthy volunteers and were negative until D7.

DISCUSSION

Resveratrol (CAS no. 501-36-0) is known for its antioxidant and anti-inflammatory properties and can be found in different fruits and plants such as grapes, nuts and berry. It is generally used in cosmetic creams as an anti-ageing and a brightening agent.² Only two other cases of allergic contact dermatitis to resveratrol have been reported in the literature: in an emollient³—with a co-sensitization to pentylene glycol—and in an SVR facial serum (SVR).⁴

S. baicalensis (CAS no 94279-99-9) is used in traditional herbal medicine and, as resveratrol, it has antioxidant and anti-inflammatory properties.⁵ It has also been studied in contact dermatitis models and

showed beneficial effects.⁵ Very few cases of allergic contact dermatitis to *S. baicalensis* have been published, mainly related to Anthelios sunscreen (La Roche Posay, L'Oreal) with reports of three affected patients.^{6–8} Only one other case of allergic contact dermatitis to both resveratrol and *S. baicalensis* has been published in a 49-year-old woman using Resveratrol BE cream, like our patient.⁹ Both resveratrol 1% aq. and *S. baicalensis* 0.5% aq. have been tested in healthy patients and showed no positive reaction, confirming the absence of irritation when tested at these concentrations.^{3–9}



FIGURE 1 Facial dermatitis following the application of Resveratrol BE cream



FIGURE 2 Result of patch tests with Resveratrol BE cream, resveratrol 1% aq. and *Scutellaria baicalensis* root extract 0.5% aq

This case highlights the importance of patch testing all the cosmetics in question brought by the patient, and in case of a positive reaction, to perform an additional patch test with the respective ingredients, in order to identify new emerging allergens.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

ETHICS STATEMENT

Patient gave her consent for the publication of her picture in *Contact Dermatitis*.

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Allergic contact dermatitis in a psoriasis patient caused by cetylstearyl alcohol

Francisco J. Navarro-Triviño¹ | Ricardo Ruiz-Villaverde²

¹Department of Contact Eczema and Immunoallergic Diseases, Dermatology, Hospital Universitario San Cecilio, Granada, Spain

²Department of Dermatology, Hospital Universitario San Cecilio, Granada, Spain

Correspondence

Francisco J. Navarro-Triviño, Hospital Universitario San Cecilio, Granada, Avenida de la Ilustración, s/n CP 18016, Granada, Spain.
Email: fntmed@gmail.com

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