CONTACT POINTS

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Contact dermatitis due to Centella asiatica

Contact Dermatitis 2010: 62: 54-55

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Key words: allergic contact dermatitis; *Centella asiatica*; Indian pennywort; Madecassol.

Centella asiatica is an herbaceous plant of the *Umbelliferae* family, widely used on surgical wounds, keloids, hypertrophic scars, leg ulcers,

phlebitis, cellulitis, and striae distensae (1). It is claimed to have actions on various phases of wound repair, stimulating extracellular matrix accumulation and collagen synthesis. *Centella* contains several active constituents, of which the most important are the triterpenoid saponins—asiaticoside, madecassoside, and asiatic acid (1).

Case Report

A 42-year-old non-atopic woman with no relevant past history presented with localized, severe eczema on her neck and upper chest, after treating a hypertrophic thyroidectomy scar with Madecassol® ointment. She required systemic corticosteroid therapy. One

month later, patch tests were performed with the ointment (tested 'as is') and its ingredients, provided by the manufacturer and prepared according to the concentrations found in the literature. We obtained positive reactions to the ointment itself as well as to *C. asiatica* extract (1% and 5% pet.) and weak reactions (probably of irritant nature) to lavender oil (20% pet.) and propylene glycol (5% pet.) (Fig. 1). Patch tests with *C. asiatica* extract 1% and 5% in 20 controls were negative.

Discussion

There are few well-documented reports of contact allergy to *C. asiatic* demonstrated by patch testing (2–6). The



Fig. 1. Positive reaction to Centella asiatica extract (1% and 5% pet.).

low sensitizing capacity of the three triterpenic compounds might be explained by their relatively high molecular weight (487–503) (1). Even though applied frequently to the damaged skin, the risk of contact dermatitis is considered low (1, 2).

References

- 1. Hausen B M. *Centella asiatica* (Indian pennywort), an effective therapeutic but a weak sensitizer. *Contact Dermatitis* 1993: 29: 175–179.
- Eun H C, Lee A Y. Contact dermatitis due to madecassol. Contact Dermatitis 1985: 13: 310–313.
- Izu R, Aguirre A, Gil N, Díaz-Pérez JL. Allergic contact dermatitis from a cream containing *Centella asiatica* extract. *Contact Dermatitis* 1992: 26: 192–193.
- 4. Danese P, Carnevali C, Bertazzoni M G. Allergic contact dermatitis due to *Centella asiatica* extract. *Contact Dermatitis* 1994: 31: 201.
- Bilbao I, Aguirre A, Zabala R, González R, Ratón J, Diaz Pérez JL. Allergic contact dermatitis from butoxyethyl nicotinic acid and *Centella asi*atica extract. *Contact Dermatitis* 1995: 33: 435–436.
- Gonzalo Garijo M A, Revenga Arranz F, Bobadilla González P. Allergic contact dermatitis due to *Centella asiatica*: a new case. *Allergol Immunopathol* (Madr) 1996: 24: 132–134.

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