

Contact allergy to dexpanthenol

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In spite of the wide applications of dexpanthenol (Fig. 1), contact allergy seems to be rare and has seldom been reported (1-3). We have recently seen a new case.

Case Report

A 33-year-old woman, with post-thrombotic syndrome since her second pregnancy 13 years ago, was referred with extensive leg ulcers and stasis dermatitis on both legs. Skin grafting was performed due to the extension of the ulcers, and additional conservative local treatment given. The autologous grafts from the thigh were well accepted. However, the skin around the ulcers and the donor site at the thigh showed persistent erythema, vesicles and oozing. Since patch testing with the allergens of a standard series and common constituents of ointments did not give any positive result, all external medications prescribed were tested additionally. None was positive. Finally the patient admitted to use of an ointment containing panthenol (Bepanthen Roche Salbe®) on her own. An epicutaneous test of the commercial preparation yielded a ++ reaction with redness, infiltration and vesicles. On testing of the single constituents, which were kindly supplied by Hoffmann – La Roche, a ++ reaction occurred only with dexpanthenol 5% and 10% at day 3. After avoidance of the allergen, the dermatitis quickly resolved.

Oligo- and polyvalent allergic contact dermatitis is very common in long-term stasis dermatitis (4-7), but the widely used agent dexpanthenol has been identified as a contact sensitizer only in a few cases (1-3). In the patient described, we had expected numerous sensitivities to various external medications due to the long history of a post-thrombotic syndrome with stasis dermatitis, but extensive patch testing did not yield any positive result except to dexpanthenol. It is astonishing that only this agent showed up as an allergic substance. This can serve as another sign of how diligently any contactant should be looked for when a strong suspicion of contact allergy exists.

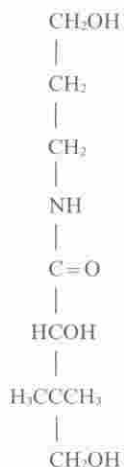


Fig. 1. Structural formula of dexpanthenol.

References

1. Ippen H. Kontaktallergie auf Dexpanthenol. *Dermatosen* 1981; 29: 45.
2. Lampe P. Kontaktallergie gegen Dexpanthenol. *Allergologie* 1984; 7: 153.
3. Schulz K H. Kontaktallergie durch Dexpanthenol. *Dermatosen* 1981; 29: 80.
4. Angelini G, Rantuccio F, Meneghini L. Contact dermatitis in patients with leg ulcers. *Contact Dermatitis* 1975; 1: 81-87.
5. Breit R. Allergen change in stasis dermatitis. *Contact Dermatitis* 1977; 3: 309-311.
6. LeRoy R, Grosshans E, Fousseureau J. Recherche d'allergie de contact dans 100 cas d'ulcère de jambe. *Dermatosen* 1981; 29: 168-171.
7. Rudzki E, Baranowska E. Contact sensitivity in stasis dermatitis. *Dermatologica* 1974; 148: 353-356.

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