



CONTACT DERMATITIS AND OCCUPATIONAL DERMATOSES

ALLERGIC CONTACT DERMATITIS CAUSED BY DEXPANTHENOL – A RARE BUT RELEVANT SENSITIZER

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Background: Dexpanthenol is an analog of pantothenic acid (vitamin B5) used in pharmaceutical and dermocosmetic for its anti-inflammatory and healing properties. Pantothenic acid is essential for a synthesis of coenzyme A in cells, which have participation in the Krebs cycle.

Observation: A 49-years-old caucasian man presented with generalized eczema of the trunk and limbs with about 10 days of evolution. 8 weeks before the onset of the dermatosis, he suffered erosions in the right leg caused by plants during his professional activity (gardener), where he applied a dexpanthenol containing cream. A few days later, he developed erythema and vesicles at the site of application, with subsequent generalization. He was medicated with prednisolone with rapid improvement and at the end of the oral treatment was prescribed methylprednisolone aceponate cream. The patient mentioned worsening of the dermatosis after the application of the latter, with self-suspension. He was submitted to patch testing with the portuguese baseline series, cosmetics and excipients series and the personal product, with positive reaction to: cetostearyl alcohol 20% pet, dexpanthenol 5% pet and personal product (dexpanthenol containing cream), both excipients were present in the dexpanthenol containing cream and cetostearyl alcohol was present in methylprednisolone cream.

Key message: Allergic contact dermatitis caused by dexpanthenol is rare, with a positivity between 0.2 and 0.7% in the series published. However, it is considered a relevant allergen, existing in a varied and growing number of products. This case is even more important as there is concomitant reactivity to another excipient - cetostearyl alcohol – an emulsifier present in several cosmetic and topical medications, which is also in agreement with the literature, with many patients acquiring multiple sensitizations.

