

of allergy to cobalt chloride, added unwittingly to nail-art materials in a 'do-it-yourself' procedure.

Case Story

A 37-year-old housewife, with no previous history of allergic contact dermatitis, presented with multiple, intensely itchy, eczematous periungual and palmar lesions on both hands, which had appeared about 7 months earlier. The patient reported that 9 months previously she had undergone a nail-art procedure by a professional beautician, and had repeated the procedure herself at home several times (approximately monthly). The 'nail gel' used was labelled 'acrylic', but the ingredients were not listed on the packaging.

Patch tests were performed in Hayes' chambers (Hayes Service BV, Alphen, the Netherlands) with the Italian Society of Allergological, Occupational and Environmental Dermatology baseline series, acrylates (butyl acrylate, butyl methacrylate, 1,6-hexanediol diacrylate, ethyl acrylate, ethyl methacrylate, ethyleneglycol dimethacrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate, isobutyl acrylate, methyl acrylate, methyl methacrylate, triethylene glycol dimethacrylate, and trimethylolpropane triacrylate), and latex (FIRMA, Florence, Italy), and the three components of the nail gel used by the patient, individually and in combination. Readings on D2 and D4 obtained according to International Contact Dermatitis Research Group guidelines showed sensitization to cobalt chloride (+++ on both D2 and D4), which was not present in the nail gel. When specifically asked, the patient admitted that she had added a 'glitter colour', bought on the Internet, to the original top coat gel. The label of the additional product revealed that it contained cobalt. Removal of all products from her nails led to complete resolution in 4 weeks.

Nail-art and cobalt allergy

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Nail art is now fashionable and commonly involves three layers of 'coating gels' being applied to the nails. Various decorations may be added between layers. As with artificial nails, allergic reactions are usually caused by acrylates (1). We report a peculiar case

Discussion

The increasing interest in nail aesthetics has recently led to the proliferation of commercially available nail cosmetics and to the invention of new products and treatments, such as artificial nails and nail art. Recent fashions popularized on the Internet have contributed to the diffusion of

a 'nail-culture'. In addition to the advertisement of professional operators and courses, users may find several fora and discussion groups to exchange advice and opinions. One can easily buy many kinds of products and have access to plenty of 'how-to' videos on the so-called 'Web 2.0' sites. This often favours a 'do-it-yourself' approach to cosmetic nail treatments. Unfortunately, information about the chemical composition of the products and the possible health risks related to the materials and techniques used are often overlooked by many web sites and even by some non-professional operators. As a consequence, diagnosis can be difficult, particularly as allergic skin reactions may occur at

remote sites from exposure, because of transfer of nail cosmetic elsewhere (2). Our case illustrates these problems vividly. Strict application of existing regulations and the introduction of new and more stringent laws appear necessary to reduce health risks related to nail cosmetics.

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