



Acrylates: An Enemy of Nail Technicians

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Case Report

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Abstract

We report a case of allergic contact dermatitis caused by acrylates in a nail technician.

Keywords: Acrylate; Nail technician; Manicurist; Allergy; Dermatitis

Case Report

A 25-years-old female was referred to our Allergy

department for evaluation of a desquamative and eczematous dermatitis located in the first, second and third fingers of both hands (Figures 1A-1C).

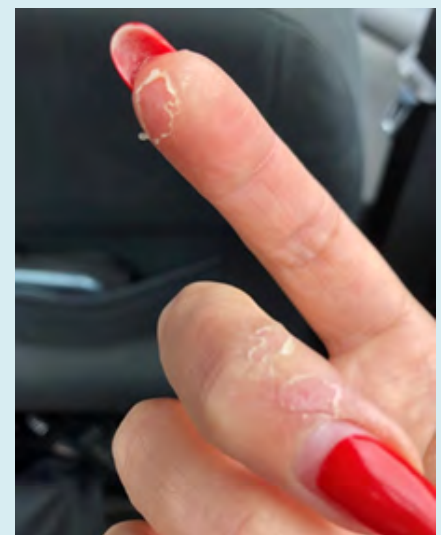
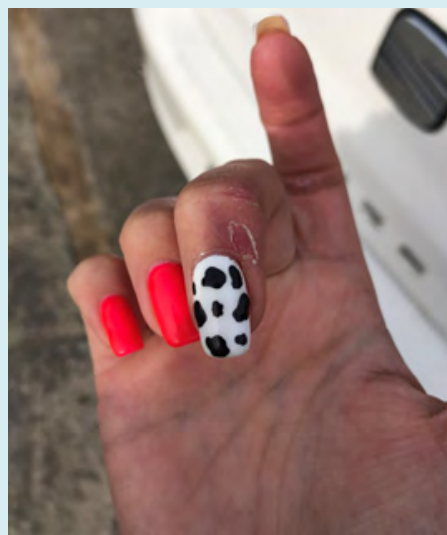


Figure 1A-1C: Desquamative dermatitis located in the first and in the third finger of right hand. Here she wears gel nails.



Figure 2: Eczematous dermatitis in the second finger of left hand. Here she wears gel nails.

She has her own nail salon where she offers sculptured artificial acrylic and gel nails which are increasingly popular. She used to wear gel nails without problems.

She had been working a month as a professional nail beautician when she started with skin problems on the first, second and third finger, which she works mainly. The patient noticed that it was happening only when she manipulated acrylic nails, and she remained asymptomatic when she was doing gel manicure.

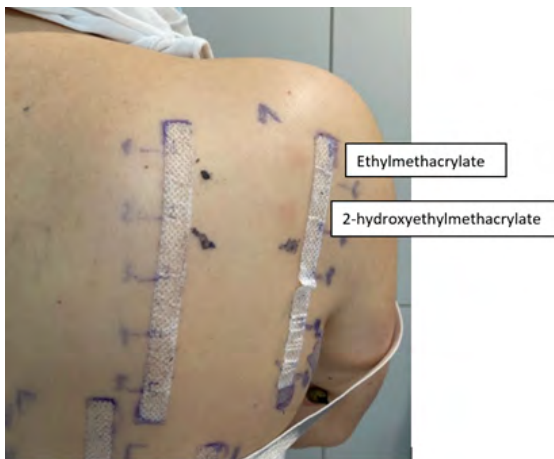


Figure 3: Positive patch tests to 2-hydroxyethylmethacrylate and Ethylmethacrylate.

Patch testing was performed with the TRUE Test as baseline series, supplemented with acrylates. Moreover, nitrile, vinyl and latex gloves was patch tested “as is”. Positive patch tests were seen to 2-hydroxyethylmethacrylate (2-

HEMA) and ethylmethacrylate (EMA) (+: positive reaction) (Figure 3) [1-4].

Nowadays the patient avoids direct contact to acrylates using nitrile gloves and she is asymptomatic. She still wears gel nail polish without skin problems.

Knowledge of this occupational allergy allowed her to put in place avoidance measures and continued working on her own business in a normal condition.

Conclusion

With this case we want to report the relevance of carrying out the allergological study in patients with dermatitis, and especially when it is due to contact with a common substance in the patient’s work area. With this information, the patient will be able to avoid the substance involved and remain in a healthy work environment.

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