

Dyshidroticlike Contact Dermatitis and Paronychia Resulting From a Dip Powder Manicure

Lauren M. Sadowsky, MD; Margaret E. Brown, MD; Heidi H. McDonald, MD; Eric W. Kraus, MD

PRACTICE POINTS

- Manicures performed at nail salons have been associated with the development of paronychia due to inadequate sanitation practices and contact dermatitis caused by acrylates present in nail polish.
- The dip powder manicure is a relatively new manicure technique. The distribution of dermatoses and infection limited to the distal phalanges will present in patients more frequently as dip powder manicures continue to increase in popularity and are performed more frequently.

To the Editor:

A 58-year-old woman presented to our dermatology clinic with a pruritic weeping eruption circumferentially on the distal digits of both hands of 5 weeks' duration. The patient disclosed that she had been receiving dip powder manicures at a local nail salon approximately every 2 weeks over the last 3 to 6 months. She had received frequent acrylic nail extensions over the last 8 years prior to starting the dip powder manicures. Physical examination revealed well-demarcated eczematous plaques involving the lateral and proximal nail folds of the right thumb with an overlying serous crust and loss of

the cuticle (Figure 1A). Erythematous plaques with firm deep-seated microvesicles also were present on the other digits, distributed distal to the distal interphalangeal joints (Figure 1B). She was diagnosed with dyshidroticlike contact dermatitis and paronychia. Treatment included phenol 1.5% colorless solution and clobetasol ointment 0.05% for twice-daily application to the affected areas. The patient also was advised to stop receiving manicures. At 1-month follow-up, the paronychia had resolved and the dermatitis had nearly resolved.

Dip powder manicures use a wet adhesive base coat with acrylic powder and an activator topcoat to initiate a chemical reaction that hardens and sets the nail polish. The colored powder typically is applied by dipping the digit up to the distal interphalangeal joint into a small container of loose powder and then brushing away the excess (Figure 2). Acrylate, a chemical present in dip powders, is a known allergen and has been associated with the development of allergic contact dermatitis and onychodystrophy in patients after receiving acrylic and UV-cured gel polish manicures.^{1,2} Inadequate sanitation practices at nail salons also have been associated with infection transmission.^{3,4} Additionally, the news media has covered the potential risk of infection due to contamination from reused dip manicure powder and the use of communal powder containers.⁵

Dr. Sadowsky is from Rush Medical College, Rush University, Chicago, Illinois. Drs. Brown, McDonald, and Kraus are from the University of Texas Health Science Center at San Antonio. Dr. Kraus also is from the South Texas Veterans Health Care System, San Antonio.

The authors report no conflict of interest.

Correspondence: Margaret E. Brown, MD, University of Texas Health Science Center at San Antonio, 7979 Wurzbach Rd, Mail Code 7876, San Antonio, TX 78229 (BrownME@livemail.uthscsa.edu).

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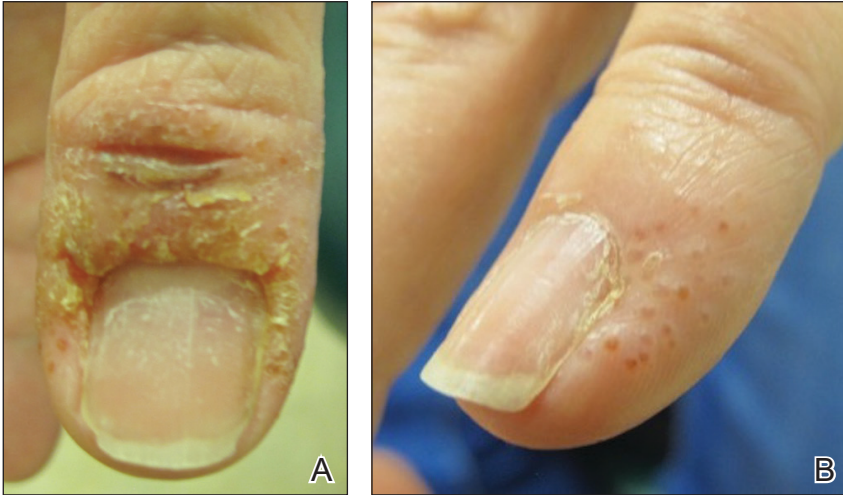


FIGURE 1. A, Dyshidroticlike contact dermatitis of the right thumb with well-demarcated eczematous plaques involving the lateral and proximal nail folds with overlying serous crust and loss of the cuticle 5 weeks after a dip powder manicure. B, An erythematous plaque with firm, deep-seated microvesicles was present on the left fifth digit, distributed distal to the distal interphalangeal joint.

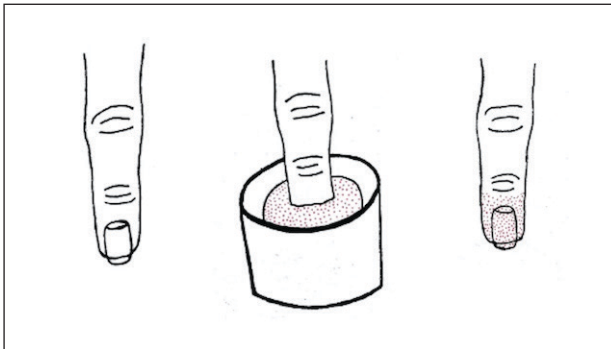


FIGURE 2. The dip powder manicure application technique involves the digit being dipped in a container of loose-colored powder to color the nail plate and then brushing away the excess.

To increase clinical awareness of the dip manicure technique, we describe the presentation and successful

treatment of dyshidroticlike contact dermatitis and paronychia that occurred in a patient after she received a dip powder manicure. Dermatoses and infection limited to the distal phalanges will present in patients more frequently as dip powder manicures continue to increase in popularity and frequency.

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