

Salon Nails: Beautiful, Itchy, or Infectious

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Recently, there has been a movement to open a nail salon every 2 blocks in New York City. The manicure and pedicure craze affects women of all ages and levels of education. Moreover, manicures and pedicures are not just for women. There is a growing subgroup of men who desire buffed and shaped nails as well. But is this a safe practice? What are the potential risks associated with nail salon usage?

Of course there is always a risk for allergic contact dermatitis. In the salon, most polishes contain formaldehyde resin to enhance the strength and life of the manicure. Furthermore, it is typical to find polish with metal balls that mix the polish, risking the elicitation of nickel. Many women remark that their manicurist provides a good massage. Often, the hand creams used for massage are scented and contain ingredients such as propylene glycol, formaldehyde, formaldehyde releasers, and lanolin. Thus, patients sensitive to these products increase their risk for an episode of allergic contact dermatitis of the hand or, more commonly, of the eyelids, from hand cream residues. The most aggressive contact dermatitis usually is seen with adhesives. Allergies to methacrylates, cyanoacrylates, or rubber ingredients, tips, wraps, or sculpted nails applied with adhesive can cause severe contact dermatitis of the digits, with paronychia and possible nail dystrophy. The scariest reports of late have demonstrated neurocognitive changes among nail salon workers using acrylates.¹

Infection is another common outcome of manicures. Nail salons can spread fungal, bacterial, viral, and mycobacterial infections. In the past, paronychial infections of both the bacterial and fungal types have been reported after manicures. This is enhanced with cuticle manipulation. Anecdotally, patients have reported the development of onychomycosis after visiting a nail salon. This is not surprising, given that there have been reports of *Sporothrix*, *Candida*, and dermatophytes persisting well on the surfaces of swimming pools.²⁻⁵ Similarly, this suggests that communal footbaths in a salon are likely to be colonized.

Personally, I have seen a patient develop a wart 2 weeks after a footbath and pedicure. This is not surprising given that one is almost 27 times more likely to develop warts with use of public showers.⁶

Hepatitis C viral infections have been reported in Italy to have a statistical association with nail salon usage.⁷ Investigators in Santa Cruz, California, recently reviewed an outbreak of *Mycobacterium fortuitum* furunculosis in 110 customers of a nail salon. These customers developed furunculosis of the feet and legs after usage of a whirlpool footbath in the salon. Most of the affected individuals had shaved their legs before the pedicure, which was felt to enhance risk because of small cuts in the skin. Ten of the footbaths in the salon tested positive for *M fortuitum*.⁸

The nail salon industry needs to be monitored more intensely. The use of UV light for sterilization of equipment is inadequate. Equipment sterilization should be done according to the US Occupational Safety and Health Administration (OSHA) standards. In summary, patients should be advised to avoid communal footbaths, own their own manicure equipment, and object to cuticle manipulation.

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