



NAIL DISORDERS

## PSORIASIFORM NAIL CONTACT DERMATITIS AND HEMORRHAGIC ONYCHOLYSIS AS A SIDE EFFECT FROM GEL POLISH MANICURE USE

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**Background:** The nail unit is a specialized form of epithelium with both protective and cosmetic functions. Nail beautifying methods are increasing in popularity. These include acrylic nails and gel polish nails.

The application of acrylic nail involves a series of steps, including removal of the the cuticle, buffering the nail plate surface, priming the nail plate using a solution that contains methacrylic acid to prepare for acrylate adhesion, and the application of the acrylic nail. The acrylic nail is made from a mixture of powdered polymer and monomer liquid that is applied on top of the nail plate and dried without photocuring.

The gel polish manicure is a type of acrylic liquid that is applied to the prepped nail plate (removal of cuticle and buffering of nail plate), and then polymerized by light source (either UVA or LED light) .

Possible complications of these products include traumatic onycholysis, contact dermatitis that often shows psoriasiform features, and pterygium inversum unguis. Additionally, acrylic nails and acrylic nail polish can become occupational hazards for nail technicians.

**Observation:** Here we report 12 cases of contact dermatitis secondary to gel polish manicure. Clinical manifestations included psoriasiform features with acute onycholysis and subungual hyperkeratosis, acute paronychia and acute hemorrhagic onycholysis. Patch tests with the standard and acrylate series were performed in 8 patients with positive reactions to 2-hydroxypropyl methacrylate ( 3 cases) and 2-hydroxy ethylacrylate ( 8 cases). Methyl methacrylate was negative in all cases.

**Key message:** Psoriasiform nail dermatitis can be misdiagnosed and mistreated as nail psoriasis.

