

## Innovations

# Therapeutic pearl: Post-traumatic acute onycholysis fingernail chemical sealing

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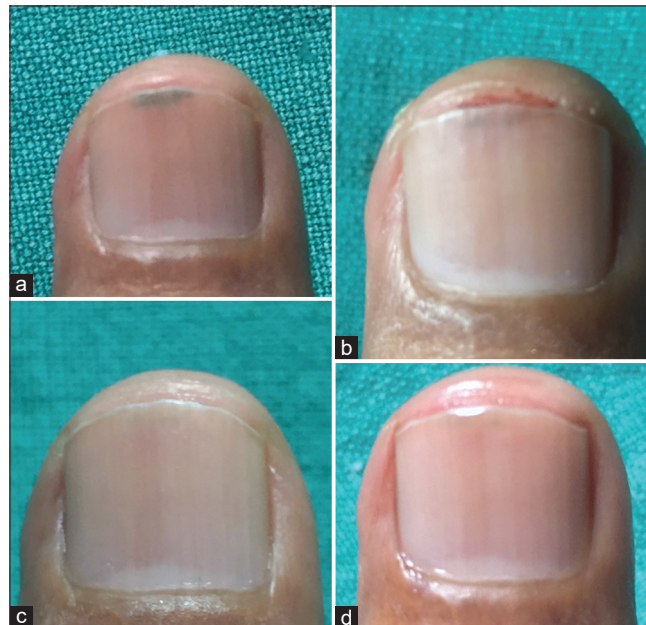
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## PROBLEM

The separation of the nail plate from its bed is known as onycholysis of the fingernail and toenail. Trauma, manicuring, or occupational or self-inflicted behavior toward the hyponychial band can all result in onycholysis of the distal part of the fingernail.<sup>[1]</sup> If not treated quickly, acute post-traumatic onycholysis causes discomfort, inflammation, infection, and the deposition of foreign materials, and it takes longer to recover. This ailment is treated with a variety of symptomatic therapies.<sup>[2]</sup> No therapy has addressed the sealing of the area with better approximation of the nail plate with its bed and the hypo-onychia band to keep the space dry and free of allergies, irritants, foreign objects, and infection to date. The authors offer a unique therapeutic technique for post-traumatic acute distal fingernail onycholysis.



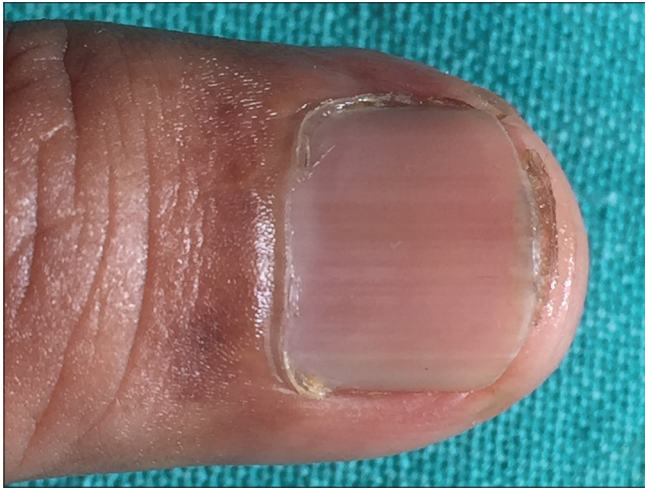
**Figure 1:** (a-d) Different stages of treatment of acute painful distal onycholysis nail with foreign bodies.

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## SOLUTION

First, the onycholysis region is aseptically cleansed, and any foreign items, such as black debris, are removed using a



**Figure 2:** The treated onycholysis nail after 2 weeks, which healed after 4 weeks.

hypodermic needle (after the needle tip is snipped with a nail cutter to avoid injury to the nail bed). To eliminate any leftover debris, the nail bed is cleansed with lotion, povidone-iodine, and normal saline using a needle-tipped syringe. The onycholysis space and hyponychium, including its band, are subsequently sealed with 1–2 drops of cyanoacrylate glue. Following the treatment, the patient was pain free and able to resume normal activities [Figure 1a-d]. If the adhesive glue becomes dislodged due to routine work, the patient can apply 1–2 drops of glue to the finger's hyponychium at a 1–2 days interval. For 6–8 weeks, the patients were observed every 2 weeks to ensure proper maturation or healing of the fibrous hypo-onychial band [Figure 2]. This method effectively cured three cases of acute onycholysis of fingernails. As a consequence, the glue looks to be an effective and reasonably priced option for sealing and preserving the nail bed from aggravating components, as well as assisting in the approximation of the nail plate and nail bed and thus in the healing of the onycholysis nail bed and hyponychial band [Figure 3a-h]. The glue has been authorized by the FDA as the least allergenic superglue in the United States. However, in around 1% of instances, it can induce irritating and



**Figure 3:** (a-h) Different steps of chemical sealing in detail of acute post-traumatic onycholysis.

allergic contact dermatitis and paronychia. Chemical burns, in our experience, are more prevalent due to their exothermic reactions. Cotton-type materials should not be present at the place of use. Liquid paraffin should be applied in the surrounding region, particularly in the nail gutter, to minimize or reduce the adverse effects of paronychia.

#### **Declaration of patient consent**

Patient's consent not required as patient's identity is not disclosed or compromised.

#### **Financial support and sponsorship**

Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

#### **REFERENCE**

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