
Surgical marking pen improving nail pitting visualization



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CLINICAL CHALLENGE

Pits are small punctate depressions of the nail plate surface, resulting from detachment of parakeratotic cells because of a focal keratinization defect of the proximal matrix.¹ Nail pitting is observed in psoriasis, alopecia areata, and eczematous dermatitis, among other conditions.¹ Pits in alopecia areata are smaller and more regular in size and are distributed along the nail plate in a so-called geometric pattern, compared with the broad, irregular pits in psoriasis.² Although the diagnosis and also the pattern of nail pitting are determined clinically, the small depressions might be subtle on clinical examination and sometimes are not clearly visualized, even under magnification (Figs 1, A, and 2, A). Often it can also be difficult to obtain effective nail photographs, hindering the monitoring of therapeutic improvement. A better visualization of nail pitting size and its distribution may help the diagnosis of a specific disease, especially in cases in which it is the only sign, and may aid in the calculation of nail disease severity scores such as the nail psoriasis severity index.

SOLUTION

For better visualization of nail pits, we paint the nail plate with a surgical marking pen or permanent marker (Fig 1, B) and then wipe it off with a 70% isopropyl alcohol pad (Fig 1, C). Most of the ink can be easily removed from the nail surface, whereas it remains inside the punctate depressions, enhancing nail pitting visualization (Figs 1, D, and 2, B). The remaining paint inside the pits can be easily removed with nail polish remover.

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Fig 1. Nail psoriasis. **A**, Nail pitting not clearly visualized on clinical examination. **B**, After the nail plate is painted with a surgical marking pen. **C**, The ink is wiped off with 70% isopropyl alcohol. **D**, Ink retained inside the punctate depressions, enhancing nail pitting visualization.

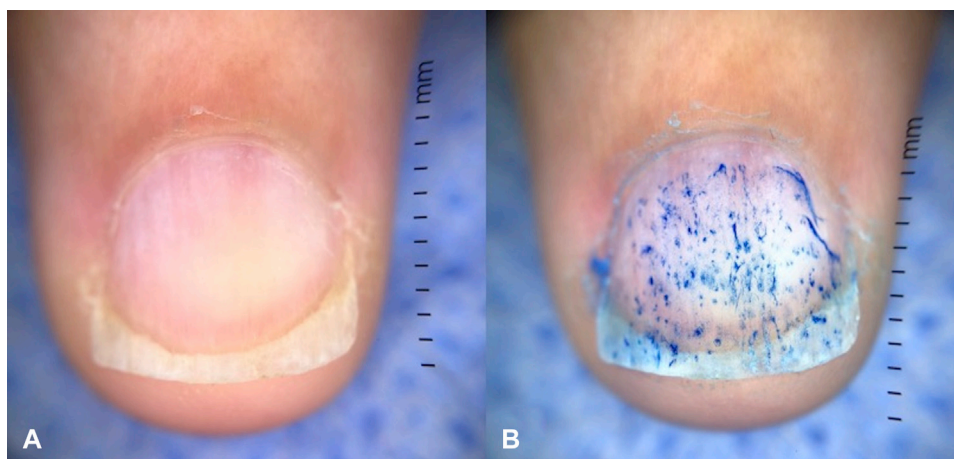


Fig 2. Nail psoriasis. **A**, Dry dermoscopy of the case shown in Fig 1. **B**, Before ink removal. Note improvement of nail pitting visualization. (DermLite DL4 stain; original magnification: $\times 10$ [DermLite, 3Gen Inc, San Juan Capistrano, CA].)

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