Use of multifilament nylon floss in onychocryptosis

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Key words: nylon floss; onychocryptosis.

SURGICAL CHALLENGE

Onychocryptosis is amongst the most common nail disorders seen in dermatology practice. Surgical treatment modalities are limited by long downtime and poor nail aesthetics. Early-stage onychocryptosis can be managed conservatively with use of dental floss, which provides immediate pain relief.[1] Two types of dental flosses are commercially available.[2] One is the traditional woven floss made from nylon; the other one is made from polytetrafluoroethylene (Stim dental aids, India). The problem with the use of floss is that it comes off repeatedly (especially the smoother polytetrafluoroethylene floss) and needs repeated insertion.

SOLUTION

Polytetrafluoroethylene is a monofilament with negligible hygroscopic properties, whereas nylon is a thick polyfilament with significant hygroscopic properties.[2] Nylon floss (Stim dental aids, India) is inserted at the both angles (forming a bridge under the free edge of the nail plate) and the ends are woven together and brought to the front, where a piece of adhesive tape is applied (Fig 1, *A* and *B*). The multifilament nylon floss absorbs atmospheric moisture and therefore swells (Fig 1, *C*). This leads to the floss getting impacted between the nail spicule and nailfold and increases its retention time. The thread of floss should be changed daily along with the adhesive tape. The flossing should be continued until the nail plate grows marginally beyond the nailfolds and no contact between the nail spicule and soft tissue remains. Noninvasive, multifilament nylon floss inserted using aforementioned method thus provides an easy and patient-friendly option for management of the initial inflammatory stages of onychocryptosis with good retention time (Fig 1, *D* and *E*).

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Funding sources: None.
Conflicts of interest: None disclosed.
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J Am Acad Dermatol 2019;81:e61-2.
0190-9622/$36.00

https://doi.org/10.1016/j.jaad.2018.10.007

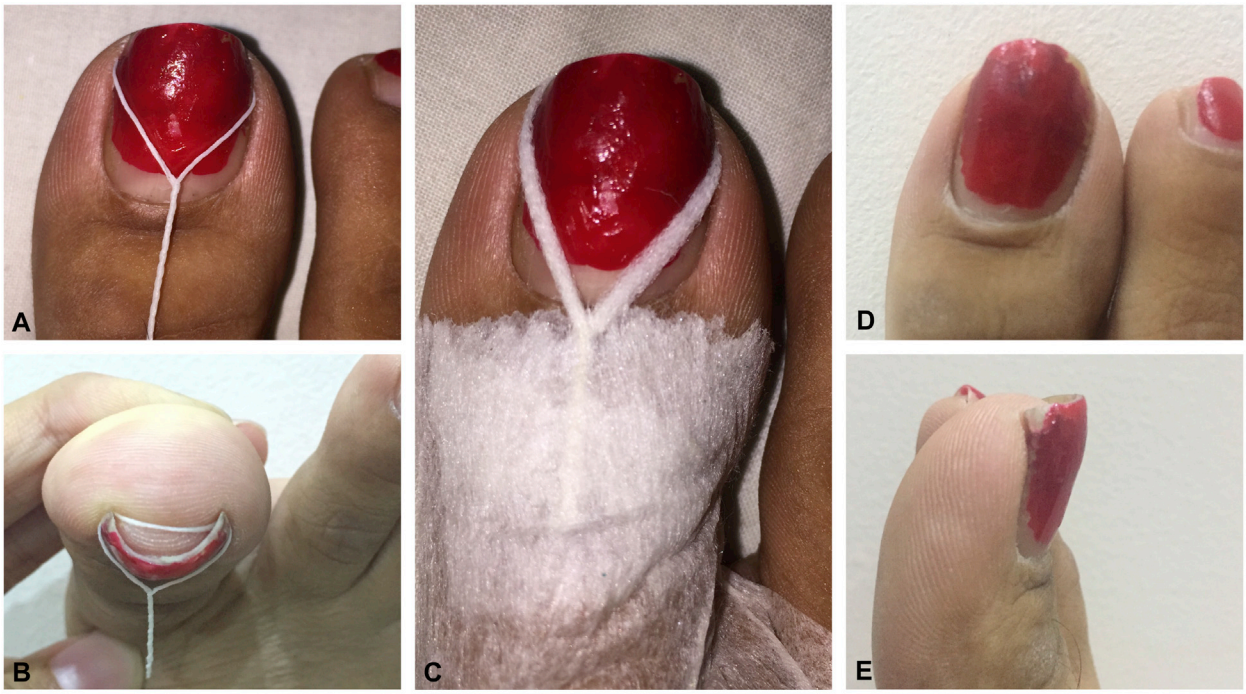

Fig 1. Onychocryptosis associated with pincer nail. Though the visible inflammation is minimal, pain is significant. **A**, Nylon floss is inserted at both angles, and the ends are woven together and brought to the front. An adhesive bandage is then applied on the front. **B**, The floss can be seen forming a bridge under the free edge of the nail plate. **C**, After an hour, the floss is visibly thicker and impacted nicely between the nail spicule and nailfold. **D**, After 20 days of repeated floss use, the erythema has subsided and the symptoms have resolved. **E**, The nail plate has grown marginally beyond the nailfolds during the period of floss use, and no contact between the nail spicule and soft tissue remains.

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