

Posttraumatic Ectopic Nail: A Usual Manifestation and Treatment of an Unusual Anomaly

Ercan Çalışkan, Didem Dinçer, Gürol Açıkgoz, Erol Koç

Department of Dermatology, Gulhane School of Medicine, Ankara, Turkey

Dear Editor:

Ectopic nail is defined as the development of nail tissue in a location other than the usual nail unit. More than 50 cases have been reported, and most are congenital¹. We present the case of a 21-year-old man with traumatic ectopic nail. He had two horny prominences on the dorsal area of the distal phalanx on the third finger (Fig. 1) that had been present for approximately 6 years. He had a history of fingertip injury treated surgically. On dermatological examination, nail-like structures 3×5 mm and 5×10 mm were noted, and the surrounding skin was slightly swollen without inflammation. Other nails were unaffected. There was no pain, discomfort, or joint movement limitation. Radiographic evaluation revealed no bone deformity.

After digital block with lidocaine, we applied a tourniquet to avoid bleeding. To preserve the matrix of the normal nail and minimize the risk of recurrence due to incomplete excision of the ectopic matrix, we exposed the whole surgical area. Oblique incisions were made at both corners of the proximal nail fold (PNF). After inserting the scalpel just beneath the ectopic nail to its base, we undermined the ectopic matrix and exposed the normal nail matrix. The ectopic nails were completely excised with their matrices, keeping away from the main nail unit to avoid permanent nail dystrophy. Finally, primary sutures were placed. The histopathology of the excised material was similar to the normal nail plate and matrix. There has been no recurrence or nail disfigurement after 1 year.



Fig. 1. (A) Close-up view of the ectopic nail showing a bipartite structure. The root of the detached nail located on the distal phalanx extending through the proximal nail fold (PNF). (B) Both parts are separated with longitudinal incision and oblique incisions were made at the both corners of PNF. Care should be taken not to damage main matrix and insertion of tendon. (C) No recurrences or nail deformity 1 year after the treatment.

Received June 18, 2013, Revised October 31, 2013, Accepted for publication November 25, 2013

Corresponding author: Ercan Çalışkan, Department of Dermatology, Gulhane School of Medicine, Etlik, Kecioren, Ankara 06018, Turkey. Tel: 90-533-3649111, Fax: 90-312-3044450, E-mail: ecaliskan@gata.edu.tr

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Various hypotheses proposed about the genesis of ectopic nail include the presence of stray germinal cells, persistence of a rudimentary nail after polydactyly regression, traumatic inoculation of onychocytes, and the role of onychodermis in nail plate formation¹⁻⁴. Most of the reported posttraumatic cases showed dorsal finger predominance³. Their clinical manifestations and the history of trauma verify the idea of inoculation of nail matrix in fingernails. Our case is consistent with the acquired forms reported in the English literature (12 cases). Among them, seven cases were declared posttraumatic, and all involved the dorsal aspect of the fingers and toes. Although the remaining five cases were not associated with trauma, analysis of their location suggested a probable traumatic etiology. However, traumatic inoculation is insufficient to explain the congenital, and some acquired, cases. Regardless of type (congenital or acquired), the treatment for ectopic nail is total excision including the matrix. Incomplete excisions can result in recurrences^{1,2,5}. Our case demonstrates the inoculation of nail matrix in the dorsal finger. In traumatic forms affecting the fingertips, the detached matrix is generally transferred to dorsal areas

closely related to the main matrix. During surgery for such cases, the proximity of both main and detached matrix is important to prevent recurrence and the disfigurement of the main nail. Another potential complication related to the dorsal location is disruption of extensor tendon insertion. In conclusion, adequate exposure of the surgical area is crucial, and oblique incisions made at the corners of the PNF are appropriate for traumatic ectopic nails.

REFERENCES

1. Riaz F, Rashid RM, Khachemoune A. Onychoheterotopia: pathogenesis, presentation, and management of ectopic nail. *J Am Acad Dermatol* 2011;64:161-166.
2. Rajashekar M, Bhandary S, Shenoy M, Sali AR. Post traumatic ectopic nail. *J Postgrad Med* 2006;52:218.
3. Sasmaz S, Coban YK, Gumusalan Y, Boran C. Posttraumatic ectopic nail. *J Am Acad Dermatol* 2004;50:323-324.
4. Park JH, Kim JH, Lee JH, Lee DY, Jang KT, Lew BL, et al. Onychodermis (specialized nail mesenchyme) is present in ectopic nails. *J Cutan Pathol* 2013;40:600-602.
5. Ena P, Mazzarello V, Dessy LA. Ectopic plantar nail: a report of two cases. *Br J Dermatol* 2003;149:1071-1074.

<http://dx.doi.org/10.5021/ad.2014.26.6.769>

Hyperkeratotic Hand Eczema due to Use of Rubber Gloves While Driving

Yoon Seok Yang, Yun Sun Byun, Jin Hye Kim, Chun Wook Park, Hye One Kim

Department of Dermatology, Hallym University Kangnam Sacred Heart Hospital, Seoul, Korea

Dear Editor:

Hyperkeratotic hand eczema (HHE) is defined as a lesion of hand dermatitis that shows thick hyperkeratotic plaques

with or without deep fissures. This diagnosis was established in 2%~5% of patients with hand dermatitis^{1,2}. HHE is considered to have multiple causes, such as

Received November 6, 2013, Revised November 27, 2013, Accepted for publication November 28, 2013

Corresponding author: Hye One Kim, Department of Dermatology, Hallym University Kangnam Sacred Heart Hospital, 1 Singil-ro, Yeongdeungpo-gu, Seoul 150-950, Korea. Tel: 82-2-829-5221, Fax: 82-2-832-3237, E-mail: hyeonekim@gmail.com

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.