https://doi.org/10.5021/ad.2018.30.6.742

Onychopapilloma Presenting as Erythronychia and Leukonychia: Dermoscopic Features of Two Cases in Korea

Minsoo Kim[1], Gwanghyun Jo[2], Cheol Lee[3], Je-Ho Mun[2,4]

[1]Department of Medicine, University of Auckland, Auckland, New Zealand, Departments of [2]Dermatology and [3]Pathology, Seoul National University College of Medicine, [4]Institute of Human-Environment Interface Biology, Seoul National University, Seoul, Korea

Dear Editor:

Onychopapilloma is an idiopathic benign neoplasm of the nail matrix and nail bed[1]. It is a relatively new nail tumor as the term "onychopapilloma" was first established in 2000 by Baran and Perrin[1]. To date, less than 100 cases have been reported in the literature[2]. It typically presents as longitudinal erthronychia extending from the lunula to the distal nail. However, clinical diagnosis is often chal-

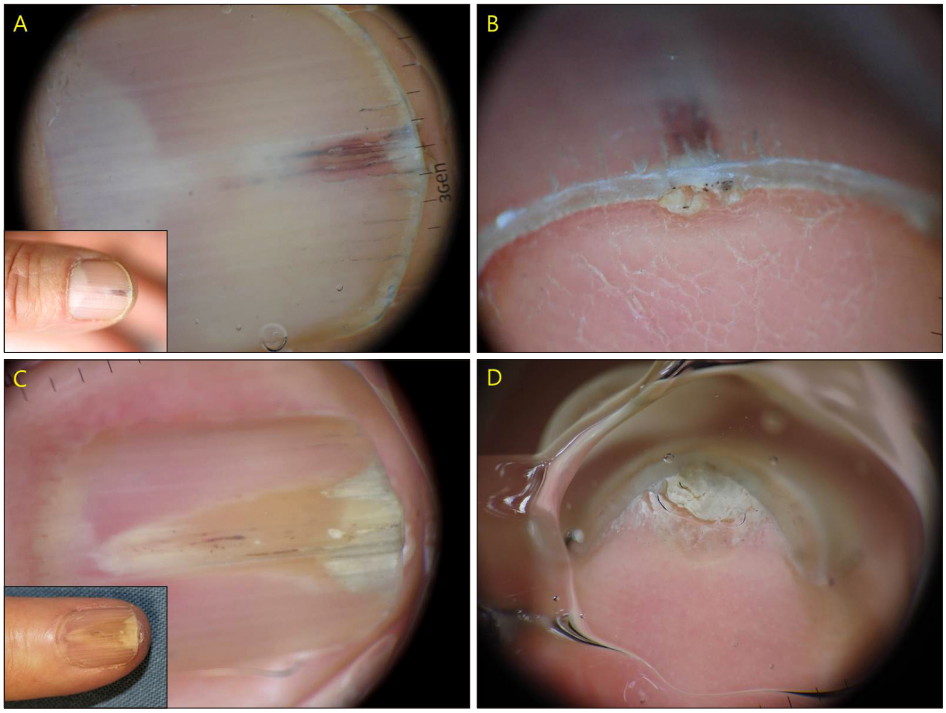


Fig. 1. (A) Dermoscopy of the nail plate showing homogeneous white bands with splinter hemorrhages (inset: clinical image). (B) Nail edge dermoscopy revealing a 2-mm subungual keratotic mass. (C) Dermoscopy of the nail plate showing V-shaped longitudinal leukonychia extending from the distal lunula border to the free edge of the nail plate. Splinter hemorrhages present with distal onycholytic change (inset: clinical image). (D) Nail edge dermoscopy disclosing a 4-mm hyperkeratotic mass lifting the nail plate at the hyponychium.

Received August 28, 2017, Revised November 26, 2017, Accepted for publication January 10, 2018

Corresponding author: Je-Ho Mun, Department of Dermatology, Seoul National University College of Medicine, 101 Daehak-ro, Jongno-gu, Seoul 03080, Korea. Tel: 82-2-2072-2417, Fax: 82-2-742-7344, E-mail: jehomun@gmail.com
ORCID: https://orcid.org/0000-0002-0734-2850

lenging because it frequently resembles other conditions. The majority of cases were reported in Western countries. Reports in Asia have been rare. To our knowledge, only two reports from Korea have been published[3,4].

A 62-year-old woman with distal red streaks on her left thumbnail was referred for evaluation. The lesion, which was mildly tender, was noted 15 years prior. On physical examination, a 2-mm longitudinal erythronychia was localized on the distal left thumb. Dermoscopy revealed a homogeneous whitish band from the lunula edge with distal splinter hemorrhages (Fig. 1A). Nail edge dermoscopy showed a localized distal subungual keratosis at the hyponychium (Fig. 1B). Histopathologic examination of excisional biopsy specimen showed an elongated digitating papillomatous acanthotic epidermis, with the superficial layer displaying keratinous zone and ample eosinophilic cytoplasm (Fig. 2). These findings were consistent for onychopapilloma.

Our second case was a 59-year-old woman who presented with a 1-year history of yellowish discoloration and distal onycholysis of the right fifth fingernail. Dermoscopy showed a V-shaped yellowish band extending from the lunula border to the free edge of the nail plate (Fig. 1C). Splinter hemorrhages were present. Nail edge dermoscopy revealed a hyperkeratotic mass lifting the nail plate (Fig. 1D). We received the patient's consent form about publishing all photographic materials. Histopathologic findings revealed acanthosis and hyperkeratosis with the upper layers of the nail bed containing eosinophilic cytoplasm of which were compatible with onychopapilloma (Supplementary Fig. 1).

Baran and Perrin first reported the condition in 1995 as "localized multinucleate distal subungual keratosis."[5] The term was later replaced with "onychopapilloma" following the histopathologic review of cases with a lack of multinucleate cells in the majority[1]. Reports on onychopapilloma are limited in the Asian population. In addition to the rarity of this disease, its unfamiliarity may be contributory to the lack of reported cases in Asia.

Onychopapilloma classically presents as localized longitudinal erythronychia, leukonychia, melanonychia, or splinter hemorrhage[2]. Dermoscopy enables clinicians to observe the detailed morphology of subtle changes within the lesion. Dermoscopic findings of onychopapilloma were recently reported as red bands, keratotic subungual masses, and splinter hemorrhages[2]. In both our cases, dermoscopy following initial inspection provided further detailed description of morphologic changes due to onychopapilloma. Both cases disclosed white or yellow homogenous bands, splinter hemorrhages, and keratotic subungual masses. The bands were not longitudinal. Although the pathogenesis of onychopapilloma is not fully understood, it is thought to affect the distal matrix[2,3]. Therefore, we propose that band sparing of the proximal

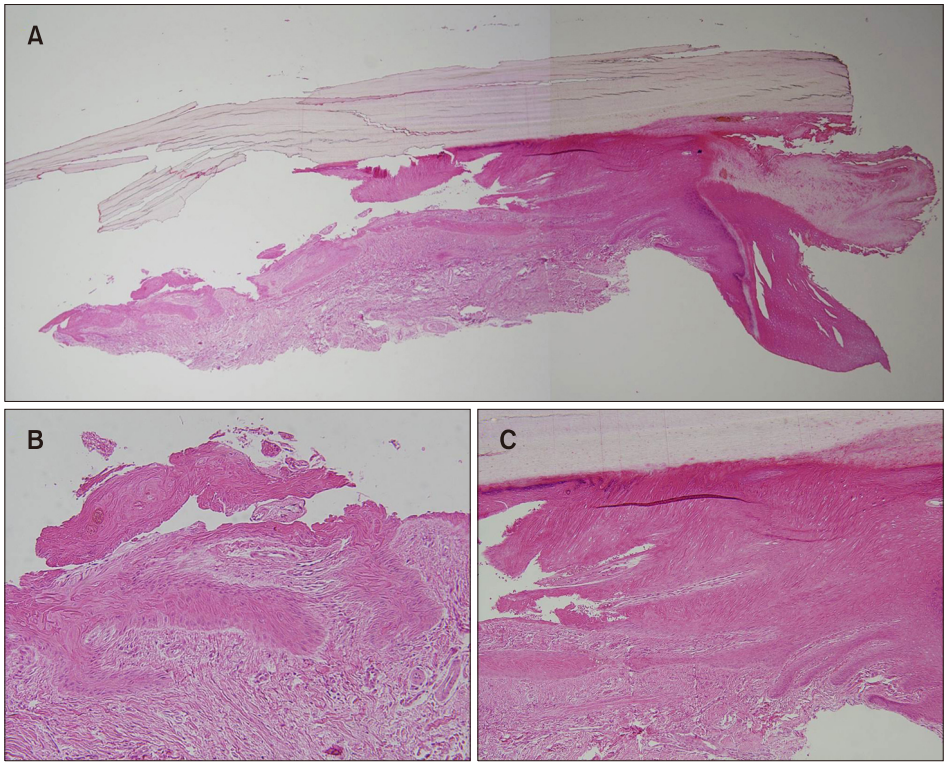


Fig. 2. Histopathologic examination revealing digitating papillomatosis and acanthosis of the nail bed and hyponychia. Features of keratogenous zone at the nail bed indicative of matrix metaplasia (H&E: A, ×40; B, ×200; C, ×100).

nail is a distinguishing trait of onychopapilloma.
In conclusion, we report two rare cases of onychopapilloma, which occurred in Asia. Dermoscopic assessment of subtle changes of the nail and its margins facilitates the recognition of onychopapilloma in the clinical setting.

SUPPLEMENTARY MATERIALS

Supplementary data can be found via http://anndermatol.org/src/sm/ad-30-742-s001.pdf.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

REFERENCES

1. Baran R, Perrin C. Longitudinal erythronychia with distal subungual keratosis: onychopapilloma of the nail bed and Bowen's disease. Br J Dermatol 2000;143:132-135.
2. Tosti A, Schneider SL, Ramirez-Quizon MN, Zaiac M, Miteva M. Clinical, dermoscopic, and pathologic features of onychopapilloma: a review of 47 cases. J Am Acad Dermatol 2016;74:521-526.
3. Kim M, Sun EY, Jung HY, Cho BK, Park HJ. Onychopapilloma: a report of three cases presenting with various longitudinal chromonychia. Ann Dermatol 2016;28:655-657.
4. Min J, Nam JH, Chae SW, Lee GY, Kim W. Case of onychopapilloma presenting as longitudinal melanonychia. Dermatologica Sinica 2017;35:102-103.
5. Baran R, Perrin C. Localized multinucleate distal subungual keratosis. Br J Dermatol 1995;133:77-82.

https://doi.org/10.5021/ad.2018.30.6.744

A Case of Indeterminate Dendritic Cell Tumor: A Rare Neoplasm with Langerhans Cell Lineage

Jungyoon Moon, Ji Hoon Yang, Jaewon Lee, Jong Seo Park, Kwang Hyun Cho

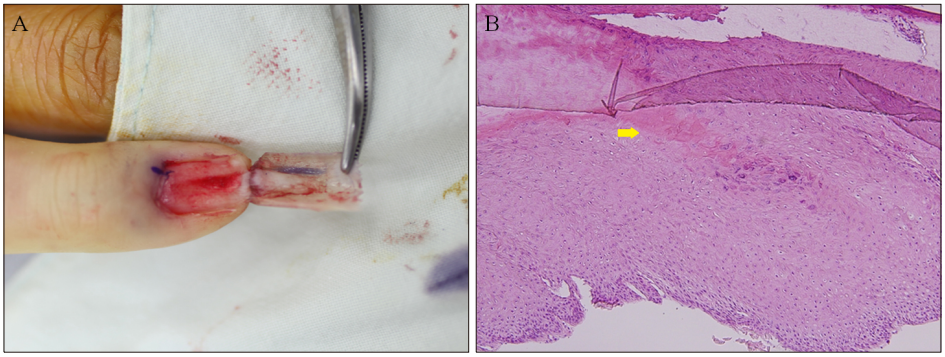
Department of Dermatology, Seoul National University College of Medicine, Seoul, Korea

Dear Editor:
Indeterminate dendritic cell tumor (IDCT) is an extremely rare neoplasm derived from indeterminate cells considered to differentiate into Langerhans cells incompletely[1].
A 61-year-old man presented with 2-year history of multifocal ulcerative nodules on his back and chest (Fig. 1). We received the patient's consent form about publishing all photographic materials. Each lesion started with a red papule and turned into a necrotic nodule. He stated that he had tried to be treated by surgery in another hospital because the number of the lesions was small at the beginning of the symptom. However, their recurrence in new areas despite repetitive excision allowed him to visit our hospital for a secondary opinion. There was no previous or family history of skin cancers. He denied any subjective symptoms including pruritus and pain.
Histopathology revealed heavy infiltrates of round to oval tumor cells, filling up the entire dermis with epidermal

Received September 15, 2017, Revised January 2, 2018, Accepted for publication January 10, 2018

Corresponding author: Kwang Hyun Cho, Department of Dermatology, Seoul National University Hospital, 101 Daehak-ro, Jongno-gu, Seoul 03080, Korea. Tel: 82-2-2072-2412, Fax: 82-2-742-7344, E-mail: khcho@snu.ac.kr
ORCID: https://orcid.org/0000-0001-9581-0265

pISSN 1013-9087 · eISSN 2005-3894
https://doi.org/10.5021/ad.2018.30.6.742



Supplementary Fig. 1. (A) Gross view of a white keratotic mass partially lifted with the distal nail plate. (B) Excisional biopsy specimen showing acanthosis with eosinophilic cytoplasm of upper layers of the nail bed (H&E, ×100). Yellow arrow indicating the keratinous zone of the nail matrix.