CONFLICTS OF INTEREST

The authors have nothing to disclose.

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Onychocytic Matricoma: Report of an Asian Case

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Dear Editor:

Onychocytic matricoma (OCM) is very rare benign subungual tumor of nail matrix origin¹. Here, we report the first Asian case with OCM.

A 41-year-old Chinese male came to the dermatology clinic with a dark line on the second finger of his right hand, which had been present for approximately ten years. He

denied pain or bleeding associated with this lesion. Physical examination of the right second digit demonstrated a 2-mm-wide black longitudinal streak extending to the distal lunula (Fig. 1A). A circular sinus was visible beneath the area of melanonychia (Fig. 1B), and a probe was inserted, resulting in no exudation but a peculiar smell.

After the central area of the nail plate was avulsed, we

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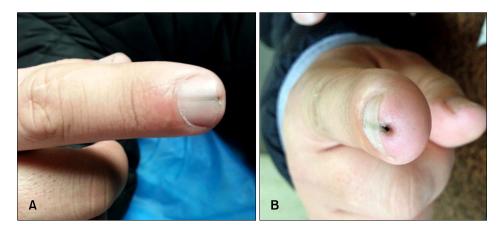


Fig. 1. Clinical feature. (A) A longitudinal melanonychia extending to the distal lunula. (B) A circular sinus was observed on the fingertip of the finger right 2.

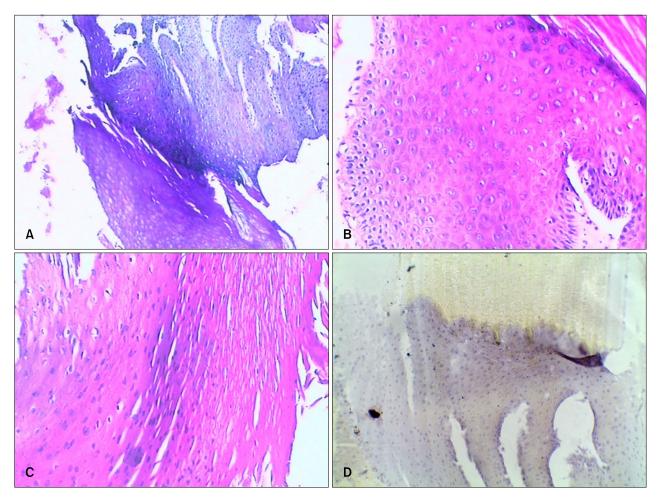


Fig. 2. (A) Histopathological feature. Obvious papillomatosis (H&E, \times 100). (B) Pigmented epithelia proliferation (H&E, \times 200). (C) Thickened keratogenous zone with retained nuclei (H&E, \times 200). (D) No proliferation of melanocytes (HMB-45, \times 100).

found that the nail plate was thickened in the area of the tumor and the epithelial component of the tumor was visualized as a black hollow extending from the proximal to the distal matrix. Next, we performed a longitudinal excisional biopsy.

Histopathological analysis revealed a thickened keratoge-

nous zone with retained nuclei, pigmented epithelia proliferation and papillomatosis (Fig. 2A~C). The melanin-derived pigmentation in the epithelium was confirmed using Fontana staining. There was no proliferation of melanocytes as assessed using immunohistochemical staining with HMB-45 (Fig. 2D). PAS stained nail clipping of the

right second nail did not find any evidence of fungal infection. On the basis of these clinical and histopathological features, a diagnosis of OCM was presented. The tumor was resected, and at regular follow-up, there was no recurrence.

OCM is subungual tumor of nail matrix origin, which presents with localized thickening of the nail plate and melanonychia. In previous studies, all patients were reported in North American and European populations. This is the first report of an OCM in a Chinese patient. In seven reported cases, all of the lesions were at the right fingernail and the duration was from six months to six years. In our case, the clinical features resembled those described by Wanat et al.'s study² with longitudinal melanonychia mimicking a foreign body. However, our case is unique because of the obvious sinus tract and longer duration.

The reason for the formation of the sinus tract is unclear, but may be due to the thickening of the nail plate. The epithelium of the nail bed showed irregular acanthosis and focally formed a granular layer with compact horny layer when the cuticle shed and discharged, and the sinus tract formed. Current treatment of the tumor is surgical excision. The main differential diagnosis of OCM is subungual seborrheic keratosis and onychomatricoma. Detailed histopathological analysis can distinguish between these diagnoses³⁻⁵.

OCM is a very rare and benign subungual tumor of nail matrix origin, and only seven cases have been reported at the present. OCM in an Asain patient has not been reported yet in English written literatures. Here, we report the first case of an Asian patient and characterized the clinical features of this rare matrical tumor to further alert clinicians of this rare benign entity and of the importance of the clinicopathological correlation to avoid misdiagnosis.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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