

neous repigmentation is more likely to be the cause of repigmentation than chemotherapy. Unfortunately, our patient was lost for further follow-up.

When pigmented lesions appear in vitiligo universalis patients, it is easy to consider pigmented skin disorders such as melasma<sup>2</sup>. Sudden repigmentation of vitiligo universalis is a rare event that must be evaluated carefully to avoid misdiagnosis.

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## CONFLICTS OF INTEREST

The authors have nothing to disclose.

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# A Case of Subungual Melanoma *In Situ* in an 18-Year-Old Girl Presented with Total Melanonychia

Cheong Ha Woo, Seung Pil Ham, Mira Choi, Hai-Jin Park

Department of Dermatology, Ilsan Paik Hospital, College of Medicine, Inje University, Goyang, Korea

Dear Editor:

Subungual melanoma (SUM) is a rare variant of malignant melanoma. It accounts for 3% of melanomas in the Caucasian population. In Asians, however, the proportion

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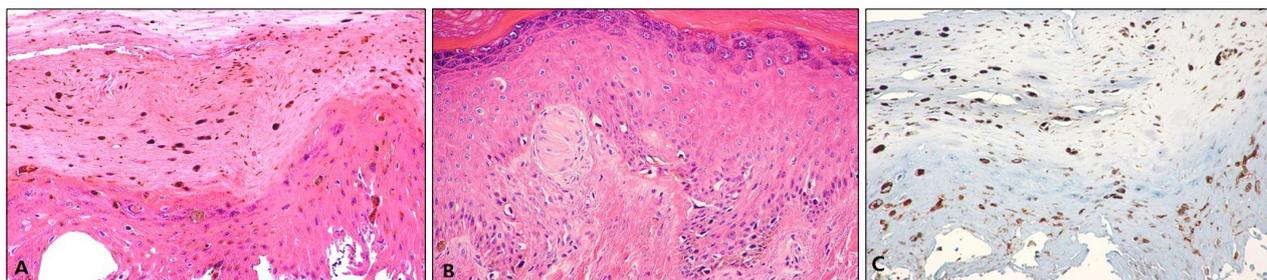
**Corresponding author:** Hai-Jin Park, Department of Dermatology, Ilsan Paik Hospital, College of Medicine, Inje University, 170 Juhwa-ro, Ilsanseo-gu, Goyang 10380, Korea. Tel: 82-31-910-7224, Fax: 82-31-910-7227, E-mail: stratum@paik.ac.kr

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**Fig. 1.** The patient presented with total melanonychia with splitting and fissuring of the nail plate on the right thumbnail. Hutchinson's sign was indicated on the proximal and lateral nail folds.



**Fig. 2.** (A) Proliferation of atypical melanocyte with pagetoid spread were noted in the nail bed (H&E,  $\times 200$ ). (B) Biopsy specimen of the fingertip demonstrated lentiginous proliferation of hyperchromatic, pleomorphic melanocytes at the dermal-epidermal junction and pagetoid spreading in the epidermis. No dermal invasion was noted (H&E,  $\times 200$ ). (C) HMB-45 stain reveals atypical melanocytes with pagetoid spread in the nail bed (immunoperoxidase,  $\times 200$ ).

of SUM is higher and it accounts for up to approximately 10% and 18% of cutaneous melanoma cases in Japan and Korea<sup>1</sup>, respectively. The mean age of onset of SUM is between 59 and 63 years old, and SUM is very rare in adolescents. The eighteen Korean patients with SUM reported by Park et al.<sup>1</sup> were all over 20 years old. We describe a case of SUM *in situ* in an 18-year-old girl. The 18-year-old girl presented with a 7-year history of black discoloration of the nail plate and dark brown pigmentation around the right thumb nail. Initially, a longitudinal pigmented band was noted on the nail plate, which then widened and darkened over time (Fig. 1). Gradually, periungual black discoloration developed on the hyponychium and proximal nail folds. In addition, splitting and fissuring of the nail plate were noted. There was no history of trauma and skin biopsy, prior to onset of symptom. There was no family history of malignant melanoma. Histopathological samples obtained from the nail plate showed irregular proliferation of spindle or round atypical melanocytes with hyperchromatic nuclei at the dermal-epidermal junction and pagetoid spreading of atypical melanocytes in the epidermis (Fig. 2A, B). Immunohistochemically, atypical melanocytes stained positive for HMB-45 staining (Fig. 2C). Based on these findings, the patient was diagnosed with SUM *in situ* and transferred to other hospital. The remaining lesions were completely excised via wide local excision.

Early diagnosis of SUM is challenging because of the diversity of the associated clinical presentations. The occurrence of longitudinal melanonychia in childhood is relatively common and generally has a good prognosis regardless of the presence of diffuse pigmentation or nail dystrophy<sup>2</sup>. However, the extension of pigmentation onto the proximal or lateral nail fold (Hutchinson's sign) and rapid progress of discoloration without any traumatic injury are signs of malignancy<sup>3</sup>. In 2015, Cooper et al.<sup>4</sup> reviewed the English-language literature and identified only 10 cases of pediatric melanonychia striata that were histopathologi-

cally confirmed to be melanoma *in situ*. SUM is generally associated with poor prognosis, as most patients are diagnosed with advanced disease and early metastases are common<sup>5</sup>. Although invasive SUM is inevitably treated by partial or complete amputation of the affected digit according to the tumor thickness, SUM *in situ* can be treated by conservative excision of the nail apparatus. As even partial loss of thumb causes significant disability, early diagnosis leads to a better functional outcome<sup>5</sup>. Therefore, we suggest in the event that there are clinical findings indicative of SUM, even if the patient is of a young age, pathological examination is recommended for early diagnosis.

## CONFLICTS OF INTEREST

The authors have nothing to disclose.

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