

Gradual Improvement of Fungal Melanonychia: A Report of Serial Images

Hyun-Min Seo¹, Ji Hun Park¹, Ki Yeon Kim² and Joung Soo Kim^{1†}

¹Department of Dermatology, Hanyang University Guri Hospital, Gyeonggi-do, Korea

²Department of Dermatology, Hanyang University Seoul Hospital, Seoul, Korea

A 60-year-old female presented with multiple blackish pigmentation on her toenails, along with nail change that first presented several months prior. Physical examination revealed multiple longitudinal blackish and yellowish striae on the first to fifth right and first and second left toenails. KOH test was performed on the involved toenails which revealed fungal hyphae. She was diagnosed with onychomycosis that induced melanonychia, known as fungal melanonychia (FM). The patient was treated with oral terbinafine for 9 months and she gradually improved (Fig. 1).

Fungal melanonychia (FM) or unguis phaeohiphomyosis is a rare nail disorder that presents with brownish or blackish pigmentation of the nail, mostly as a result of superficial infection of dematiaceous fungi¹. There is a number of species that cause FM, the most common of which are *Scytalidium dimidiatum* and *Trichophyton rubrum*¹. In a previous case series study, the clinical efficacy of oral terbinafine and itraconazole in patients with FM was reported². However, there is no established treatment method for FM due to the lack of data and to the variability in responses to antifungal treatment. There are discussion regarding a species-specific causative approach. Our experience presents the clinical course of oral terbinafine treatment of FM with high-quality serial clinical photos. This can be helpful for the future management of patients with FM.

Key Words: Fungal melanonychia, Terbinafine, Ungual phaeohiphomyosis



Fig. 1. (A) Multiple longitudinal blackish and yellowish striae and dystrophy on the first to fifth right and first and second left toenails (B) Gradual improvement of nail dystrophy and discoloration was observed after oral terbinafine treatment for three months and (C) nine months. (D) Melanonychia of the first right toe nail was clearly observed.

Received: March 3, 2022 Revised: April 11, 2022 Accepted: April 19, 2022

†Corresponding: Joung Soo Kim, Department of Dermatology, Hanyang University Guri Hospital, 153, Gyeongchun-ro, Guri-si, Gyeonggi-do, 11923, Korea.

Phone: +82-31-560-2286, Fax: +82-31-560-2282, e-mail: tuentuen@hanyang.ac.kr

Copyright©2022 by The Korean Society for Medical Mycology. All right reserved.

©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. <http://www.ksmm.org>

ACKNOWLEDGEMENT

There are no acknowledgements.

CONFLICT OF INTEREST

In relation to this article, we declare that there is no conflict of interest.

ORCID

Hyun-Min Seo: 0000-0002-6897-494X

Ji Hun Park: 0000-0002-4481-7333

Ki Yeon Kim: 0000-0002-3859-5949

Joung Soo Kim: 0000-0002-3014-9645

PATIENT CONSENT STATEMENT

The patient provided written informed consent for the publication and the use of her images.

REFERENCES

1. Finch J, Arenas R, Baran R. Fungal melanonychia. *J Am Acad Dermatol* 2012;66:830-841
2. Lee SW, Kim YC, Kim DK, Yoon TY, Park HJ, Cinn YW. Fungal melanonychia. *J Dermatol* 2004;31:904-909