

# The Role of Dermoscopy in the Diagnosis of Onychomycosis

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## Abstract

Onychomycosis is a fungal infection of the fingernails or toenails that causes discoloration, thickening, and separation from the nail bed. In the diagnosis of onychomycosis, dermoscopy can help to improve the diagnostic sensitivity and to differentiate from other different diseases. Dermoscopy can enable the visualization not only nail plate, but also nail folds, nail matrix, nail bed, and the fine structure and vessels of the free margin of the nail.

We report a case of a 48 years old female patient, presented in outpatient clinic, with complains of hyperpigmentation on the edge of her big toe nail. On the dermoscopy examination, the hyperpigmentation area of the nail revealed a homogeneous dark brown- yellow band and

proximal hyperkeratosis. No visible melanin inclusions were observed. Fungal melanonychia is rare and may simulate longitudinal melanonychia caused by melanocytic lesions. Dermoscopy appears to be a rapid and quite useful examination. We suggest and emphasize that this quick, non-invasive and highly effective examination should be considered as the first step in the diagnosis of onychomycosis followed by a direct microscopy and fungal culture as a gold standard for correct diagnosis.

**Keywords:** dermoscopy, onychomycosis, hyperpigmentation, melanonychia striata, melanoma