## Subungual Amelanotic Melanoma Masquerading as Onychomycosis, Riahi, et. al. Cureus 10(3): e2307, 2018

Level of Evidence: 4

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Described is a case highlighting a long-standing subungual nodule initially treated as a mycotic nail infection, later diagnosed via biopsy as subungual amelanotic melanoma.

A 67 year old female presented to the clinic with fingernail dystrophy of the left fourth digit of four year's duration. Physical examination revealed prominent subungual debris and longitudinal ridging without pigment changes or nail plate elevation. Nail clippings were obtained and sent for pathologic evaluation, revealing fungal hyphae with periodic acid-Schiff staining. The patient denied anti-fungal treatment at that time.

She subsequently returned three months later with onycholysis of the fingernail and a previously unseen subungual erythematous nodule. Shave biopsy of the nodule tested positive for MART-1 and S100 with invasion into both the epidermis and dermis. The diagnosis of subungual amelanotic melanoma was made. The patient was subsequently referred to a surgical oncologist for digital amputation. No metastasis noted on systemic workup.

Subungual melanoma is a rare subtype of acral lentiginous melanoma, representing approximately 2% of melanomas, with approximately 15-25% being amelanotic. Subungual melanomas are typically found in the thumb and hallux nails. Differential diagnosis for this condition is broad and can include pyogenic granuloma, squamous cell carcinoma, verruca vulgaris and hemorrhagic callus, therefore delay in diagnosis can occur due to its resemblance with these and other conditions. Patients presenting with solitary nail dystrophy should warrant thorough evaluation, including nail plate avulsion and concomitant nail bed biopsy if a subungual lesion is present. In the very least, serial monitoring should be considered to evaluate for worsening dystrophic changes and/or the presence of a new subungual lesion.

