

Tinea Manus and Tinea unguium After Plaster Casting

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A 32-year-old immunocompetent man who recently had a plaster cast on the left middle finger and hand presented with nail dystrophy of the left middle finger and an erythematous circular rash with elevated borders on the dorsum of the left hand (Fig. 1). The cast was worn for three weeks after surgery for trauma-induced finger inflammation. The patient had no history of a fungal infection and denied having any skin lesions on other parts of the body. Potassium hydroxide

smearing of both the fingernail and the dorsum of the hand revealed the presence of fungal hyphae, and fungal culture detected the presence of *Trichophyton rubrum*. The patient was treated with topical and oral antifungal agents.

Plaster casting is a common treatment for various musculo-skeletal conditions, such as bone fractures, sprains, and soft tissue injuries. The long-term use of plaster casts may cause some complications like joint stiffness and muscle atrophy



Fig. 1. Tinea manus and tinea unguium after cast immobilization (A) Dystrophy of the left third fingernail and (B) an erythematous patch with elevated peripheral borders on the dorsum of the left hand

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and cutaneous complications like pyogenic granuloma and onychomadesis^{1,2}. To the best of our knowledge, fungal infections after cast application, albeit seemingly common, have been scarcely reported in the English literature. Given the high prevalence of plaster casts and fungal infections, our images can be informative to physicians. This case highlights that fungal infections should be suspected in cases of localized erythematous rash or nail dystrophy after a prolonged cast application.

Key Words: Plaster casting, Tinea manus, Tinea unguium, *Trichophyton rubrum*

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CONFLICT OF INTEREST

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

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PATIENT CONSENT STATEMENT

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

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