

Symmetrical Sporotrichosis: Self-Inoculated by Frequently Contacting Skin Lesion?

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Research Article

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Symmetrical sporotrichosis: Self-inoculated by frequently contacting skin lesion?

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Case Report

An 85-years-old farmer presented with verrucous mass in both lower limbs. He had a history of trauma while farming on his right lower leg five years ago, followed by a prolonged unhealed ulcer. Subsequently, pea-sized verrucous hyperplasia developed in the primary lesion and then gradually developed on his left leg, which increased with symmetrical distribution on both lower extremities prone to bleeding. There were no apparent trauma and discomfort in other sites. On physical examination, exudative ulcer and verrucous plaques were seen on both lower limbs (Fig. 1a-b). 10% KOH preparation and HPV16/18-PCR examinations were negative. Histopathological examination revealed granuloma in the dermis. Yeasts cell were detected in the tissue on Periodic Acid-Schiff (PAS) and Gomori Methenamine-Silver (GMS) staining (Fig. 2a-b). Fungal culture demonstrated mycelium-like colonies on sabouraud dextrose agar after two weeks at 28°C (Fig. 2c). Microscopic examination of slide culture revealed hyaline septate hyphae, conidiophores, and conidia, characteristic structures of *Sporothrix complex* (Fig. 2d). *Sporothrix globosa* (GenBank MZ165348) was identified by ITS1/4 and CL1/CL2A-PCR. Diagnosis of symmetric sporotrichosis was confirmed. The patient was treated with oral terbinafine 500 mg per day combining with thermotherapy with electric pad after topical application of 1% naftifine hydrochloride and 0.25% ketoconazole cream. The lesions improved in a 4-months follow-up (Fig. 1c-d). It is different from the typical infection of systemic hematogenous dissemination or along with lymphatic vessels. The development and distribution of exceptional characteristics lesion indicated that the lesions on the inner side of the right leg initially transferred to that of the left normal skin, by repeatedly close skin contact during sleeping, that might have self-inoculated lesion to the normal side, resulting in bilateral symmetrical sporotrichosis in both legs.

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Figures



Figure 1

Clinical findings of the patient. a Lesions on the right lower limb and b lesions on the left lower limb before treatment. c-d Four months after treatment.

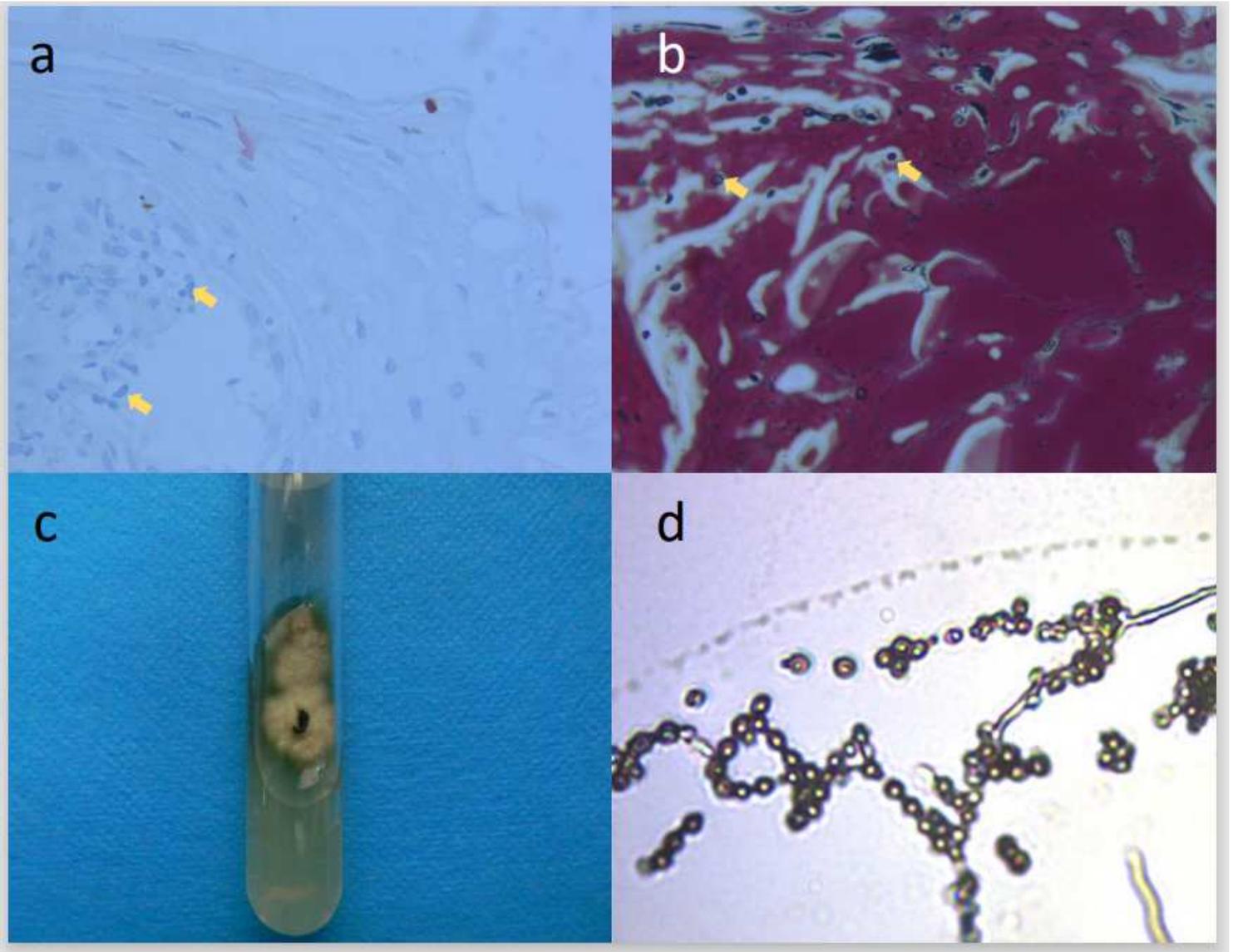


Figure 2

a PAS \times 200. Periodic Acid-Schiff stain of the tissue showed red yeast cells. b GMS \times 200. Black yeast cells were seen in the tissue with GMS stain. c Mycelium-like colonies on SDA. d Hyaline septate hyphae, conidiophores, and conidia were observed in slide culture (\times 400)

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