Human-to-Human Transmission of Sporotrichosis in a Father and Son

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Sporotrichosis is one of the most common subcutaneous mycosis caused by *Sporothrix(S.) schenckii* complex. Sporotrichosis usually occur through skin injury from contaminated plant debris or scratches from felines carrying the disease. Human-to-human transmission of the sporotrichosis is very rare in the world.

A 33-year-old male presented with a single indurated crusted ulcer on the left nose. The lesion appeared 2 years ago. Also, his son presented with a single indurated ulcer and crust on the left inner thigh which appeared a year ago. There was a time interval of one year between two lesions. He frequently gave his son a ride on his shoulder before. He and his son denied raising any animals or plants.

Histopathological examination of the lesion revealed granulomatous infiltration containing lymphocytes, histiocytes, and giant cells. GMS and PAS histochemical staining showed many spherical yeast cells. The fungal culture on Sabouraud's dextrose agar showed dark brown to black, moist and wrinkle colonies. The sequences of ribosomal DNA internal transcribed spacer region of clinical samples were 100% similarity with *S. globosa*. We diagnosed the lesion as sporotrichosis and treated with oral itraconazole or terbinafine, but they showed relapsing course. We report a rare case of sporotrichosis caused by human-to-human infection of *S.globosa*.

Fig. 1. Brown to black, moist and wrinkled colonies on Sabouraud's dextrose agar at 25°C for 2 weeks.

Fig.2. Many spherical yeast cells (red arrow) were observed in upper dermis (GMS stain X 200).

Fig. 3. Single bean-sized, yellow-brown colored, verrucous nodule is observed on the Lt. ala nasi of the father.

Fig.4. This is a possible transmission route. The father frequently gave his son a ride on his shoulder before.

Fig. 5. Single chestnut-sized, erythematous, ulcerative, crusted plaque is observed on the Lt. inner thigh of the son.