

## Tinea Barbae Caused by *Trichophyton rubrum* Mimicking Rosacea

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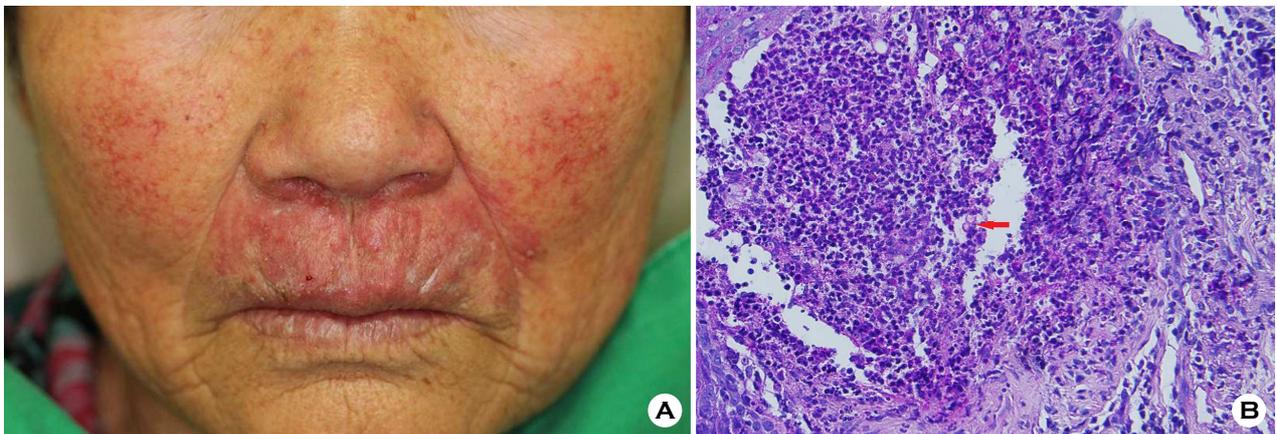
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Tinea barbae is a dermatophyte infection that unilaterally affects the face, particularly the bearded areas of the face and neck<sup>1,2</sup>. It may occur as two clinical presentations: a mild, superficial form that is characterized by erythemo-squamous plaques with active borders or a secondary form, a deep tinea that is folliculitis-like and characterized by erythematous plaques with marked pustular folliculitis<sup>3</sup>. Because of its variable clinical manifestations, tinea barbae is often deceptive and

may mimic other facial dermatoses, such as rosacea, particularly the papulopustular type<sup>4</sup>. Thus, for accurate diagnosis, mycologic study along with biopsies is important<sup>3</sup>.

An 81-year-old woman presented with a 2-month history of localized pruritic scaly erythematous plaques, papules, and pustules with telangiectasia on the perioral area and both cheeks (Fig. 1A). She was treated with over-the-counter topical steroids. She had also suffered from tinea unguium on



**Fig. 1.** (A) Localized scaly erythematous plaques, papules, and pustules with telangiectasia on the perioral area and both cheeks (B) Several spores around hair shafts with dense neutrophilic infiltration in the dermis (PAS stain, ×400, red arrow)

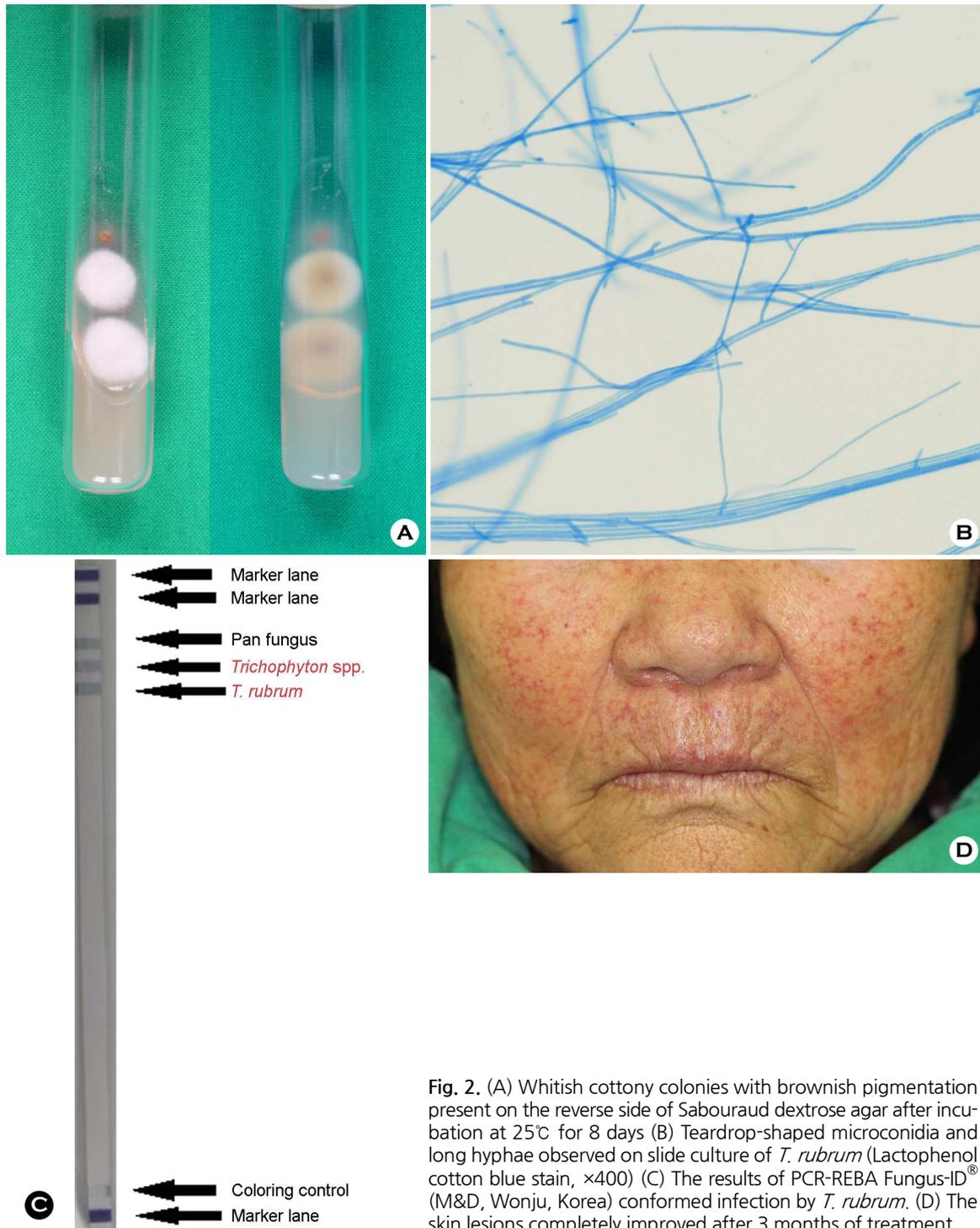
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**Fig. 2.** (A) Whitish cottony colonies with brownish pigmentation present on the reverse side of Sabouraud dextrose agar after incubation at 25°C for 8 days (B) Teardrop-shaped microconidia and long hyphae observed on slide culture of *T. rubrum* (Lactophenol cotton blue stain, ×400) (C) The results of PCR-REBA Fungus-ID® (M&D, Wonju, Korea) conformed infection by *T. rubrum*. (D) The skin lesions completely improved after 3 months of treatment.

both feet for >10 years. Histopathology showed several spores around her hair shafts with dense neutrophilic infiltration in the dermis (Fig. 1B). Culture of skin biopsy specimens on

Sabouraud dextrose agar yielded whitish cottony colonies with brownish pigmentation on the reverse side after 8 days (Fig. 2A). Microscopically, teardrop-shaped microconidia and

long hyphae were observed on slide culture of *Trichophyton rubrum* (Fig. 2B). Polymerase chain reaction-based reverse blot hybridization assay Fungus-ID<sup>®</sup> (M&D, Wonju, Korea)<sup>5</sup> of a sample confirmed *T. rubrum* infection (Fig. 2C). The patient was treated with 200 mg of oral itraconazole daily for 3 months, and the skin lesion was completely improved (Fig. 2D). Unlike tinea faciale, this patient showed folliculitis-like lesions on the dermis. Therefore, we diagnosed this deep type of tinea barbae caused by *T. rubrum* and mimicking rosacea using clinical, pathological, and culture test findings and molecular biological analysis. We report this case to emphasize the importance of mycologic evaluation of skin lesions mimicking rosacea.

**Key Words:** Rosacea, Tinea, *Trichophyton*

## CONFLICTS OF INTEREST

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

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