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BACKGROUND

- Trichophyton indotinea* (*Ti*) is a novel dermatophyte causing recalcitrant tinea outbreaks worldwide, including in the US.¹⁻³
- Itraconazole is considered the first-line treatment for *Ti* due to widespread terbinafine failure.¹⁻³
- However, current evidence and variable resistance profiles suggest terbinafine may be effective in select cases.^{4,6-10}

LEARNING OBJECTIVES

- Terbinafine minimal inhibitory concentrations (MICs) have been correlated to mutations in squalene epoxidase (SQLE) and clinical response to terbinafine.
- Antifungal susceptibility testing (AFST) and genetic analyses in *Ti* are evolving, offering potential treatment insights.

CASE PRESENTATION

- Woman in 40s presented with 2-months of a widespread pruritic eruption; relocated from India to NYC via Mexico. Upon arrival, she stayed at an US asylum facility. She denied contact with others having similar symptoms.
- Physical exam: Large, annular, scaly, erythematous plaques on face, neck, groin, lower extremities (**Figures 1-3**); KOH preparation revealed branching septate hyphae.
- Culture sent to NY State Dept. of Health Wadsworth Center.
- Prescribed 2-weeks of oral terbinafine 250 mg daily and ketoconazole 2% cream; observed clinical improvement at follow-up (**Figure 4**).
- Subsequent analyses confirmed *Ti* with low terbinafine MIC value (<0.0039 ug/mL) and SQLE polymorphism at position 448 (A448T), correlated with terbinafine susceptibility.⁶⁻¹⁰



Fig 1. *Ti* causing Tinea faciei.



Fig 2. *Ti* causing Tinea corporis.



Fig 3. *Ti* causing Tinea cruris.



Fig 4. *Ti* causing Tinea faciei, improving with 2 weeks of terbinafine 250mg daily and ketoconazole cream.

CONCLUSIONS

- Clinicians should consider *Ti* in patients with widespread, pruritic plaques of tinea, especially those recently in high-risk areas.³
- AFST may suggest utility of terbinafine for treating *Ti*.
- Genomic sequencing and AFST help enhance disease surveillance and antifungal selection, but limited lab capacity and high costs prevent their routine use.⁴

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Disclosure Page

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