Answer to Photo Quiz: *Trichophyton verrucosum*

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KEYWORDS *Trichophyton verrucosum*, tinea corporis

The fungal culture grew a dermatophyte after 14 days of incubation at 30°C on inhibitory mold agar (IMA). The low growth rate and microscopic morphology of antler-like hyphal branching and chlamydospores in chains were consistent with *Trichophyton verrucosum*. The isolate was also subcultured onto Sabouraud's agar and grew equally well at 30°C and 37°C. Sequencing of the internal transcribed spacer (ITS) regions definitively identified the isolate as *T. verrucosum* (GenBank accession no. [MH230001](https://doi.org/10.1007/s11046-008-9102-7)). The patient was diagnosed with Majocchi's granuloma due to *T. verrucosum* and received oral (terbinafine) and topical (miconazole) antifungal therapy, which led to dramatic resolution of the rash after 1 month of treatment.

T. verrucosum is a zoophilic dermatophyte found worldwide that commonly causes ringworm in cattle but can also be seen in other animals, such as horses, dogs, goats, and sheep (1). Infection is primarily spread through direct contact between animals, but zoonotic transmission has occasionally been reported. The earliest zoonosis reported in the United States was in 1959, when a group of dairy workers from Chicago, IL, were diagnosed with *T. verrucosum* infection (2). Common features used to differentiate *T. verrucosum* from other *Trichophyton* spp. are slow growth (14 to 30 days), better growth at 37°C than at 24°C, and abundant chlamydospores in chains (3). In thiamine-, inositol-, and casein-supplemented media, *T. verrucosum* can produce pear-shaped microconidia that sprout laterally from hyphae and, on rare occasions, macroconidia that have a "rat tail" appearance and vary in size (4). A diagnosis of Majocchi's granuloma due to *T. verrucosum* is suspected if a skin biopsy specimen exhibits inflammatory cell infiltrates that surround large, cylindrical fungal elements in the dermis or subcutaneous tissue (5). Although this histopathologic feature was not observed in our patient, *T. verrucosum* infection should be included in the differential diagnosis for patients with a history of farm animal contact.

Data availability. Sequences were deposited in GenBank under accession no. [MH230001](https://doi.org/10.1007/s11046-008-9102-7).

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