

Macroscopic and Microscopic Findings of *Microsporium gypseum*

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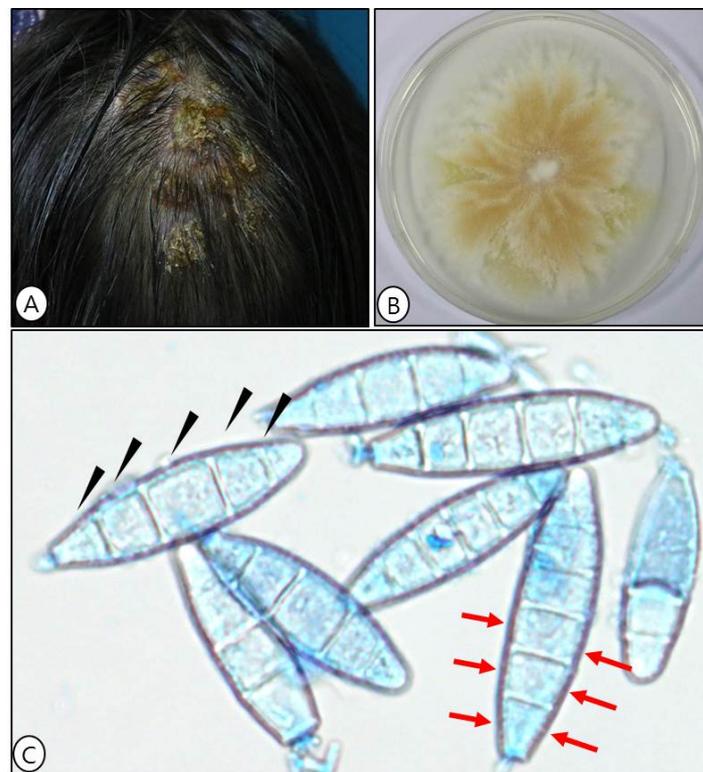


Fig. 1. **A**, Clinical image of *Tinea capitis* caused by *M. gypseum* presenting multiple yellowish to reddish pustular ulcerative plaques with surrounding scales of an 6 year old female. **B**, Cottony or powdery surface of the colony ranges from overtones of whitish to yellowish colors. **C**, Macroconidia of *M. gypseum* are spindle-shaped with short pedicels, and smooth-bordered thick walls (red arrows). Cells of the macroconidia are usually fewer than 6 cells (black arrowheads), (Cotton blue stain $\times 400$).

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Microsporium (M.) gypseum is a geophilic dermatophyte that is prevalently distributed world-wide¹. Particular transmissions occur in warm, humid, and rural areas among farmers and children. Clinical forms may present scaly patches of variable shapes and colors on the skin². Tinea capitis is the typical clinical form and pus frequently occurs from palpitated hair follicles¹⁻².

Macroscopic morphology of *M. gypseum* is characterized by powdery to granular texture with a color range of white to yellowish, often termed cinnamon colored (Fig. 1A). The powdery appearance is imparted by heavy sporulation on the older mycelium and the edges of the colony can exhibit pleomorphism described as scalloped to ragged nature³. The reverse shows no specific pattern indicative of the species. In microscopic morphology, short, spindle-shaped macroconidia are borne directly on hyphae. Characteristic macroconidium is divided in to 4 to 6 septated cells with thick walls and smooth borders (Fig. 1B). Unlike *M. canis*, macroconidia are more numerous and are less barrel-shaped with fewer cells⁴. Microscopic difference may help distinguish from other dermatophytes, however, culture and genetic studies should discern accurate diagnoses⁵.

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Key Words: Macroconidium, *Microsporium*

gypseum, Morphology

Conflict of interest

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

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