

***Tinea capitis* caused by *Nannizzia gypsea* after playing by a river**



***Tinea capitis* por *Nannizzia gypsea* tras jugar junto a un río**

Dear Editor,

A 9 year-old boy presented to the Dermatology department with pain on the occipital area and fever for the last three weeks. Topical steroids had been applied without improvement. On physical examination we observed swelling on the occipital area, patchy alopecia (Fig. 1) and an occipital adenopathy. The patient did not remember any previous contact with animals, although he had been playing with dirt by a river three weeks before. Hairs and scales were sampled for a mycological study. Direct examination with potassium hydroxide solution showed multiple hyaline septate hyphae and chains of arthroconidia around the hair shaft. In Sabouraud glucose agar granular and flat colonies with a typical cinnamon colour in the surface (Fig. 2) and beige to red brown in the reverse were isolated. Microscopically, very abundant fusiform macroconidia with thin and echinulated walls, containing 3 to 5 cells, were observed (Fig. 3). The in vitro hair perforating test was positive. Identification by mass spectrometry was made using MALDI-TOF. The mass spectrum obtained was analysed using Flex-Control and the Bruker filamentous fungi library. The patient responded well to a treatment of 20 mg/kg/day of griseofulvin over the course of 12 weeks.



Fig. 1. Swelling and patchy alopecia on the occipital area.



Fig. 2. Colonies on Sabouraud glucose agar.

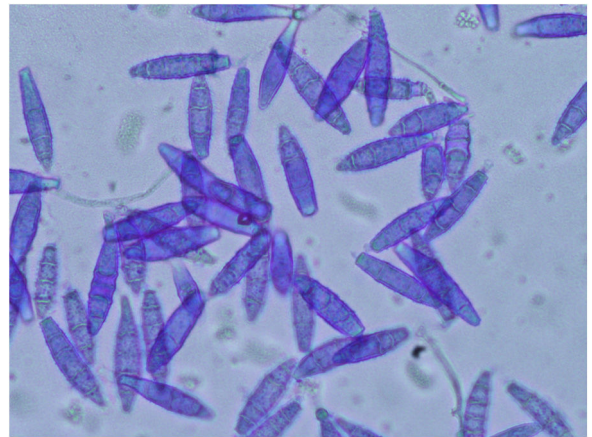


Fig. 3. Fusiform macroconidia with thin and echinulated walls (1000×, Cotton blue staining).

Nannizzia gypsea is a cosmopolite and geophilic dermatophyte^{1,2} whose habitat is the soil. It can also be isolated from the fur of small rodents and other animals, that can transmit the infection to humans as well.³ It is by far the commonest species of the geophilic group among dermatophyte infections in humans. Physicians should keep in mind that *tinea capitis* can mimic pyogenic abscess.^{2,3}

References

1. García-Agudo L, Espinosa-Ruiz J. *Tinea capitis* by *Microsporium gypseum*, an infrequent species. Arch Argent Pediatr. 2018;116:e296–9.
2. Hoarau G, Miquel J, Picot S. Kerion Celsi caused by *Microsporium gypseum*. J Pediatr. 2016;178, 296–e1.
3. Nweze E, Eke IE. Dermatophytes and dermatophytosis in the eastern and southern parts of Africa. Med Mycol. 2018;56:13–28.

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<https://doi.org/10.1016/j.riam.2020.12.003>

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