Tinea nigra: successful treatment with topical butenafine *

Tinea nigra: tratamento bem-sucedido com butenafina tópica

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Abstract: The authors report a case of Tinea nigra in an 8-year-old child, male, from Itajaí, SC, Brazil, with lesions of the macular hyperchromic type, unique, asymptomatic, localized in the right palmar area. The lesion was treated with the topical antifungal butenafine, with remission of symptoms and without recurrence at follow-up for two years.
Keywords: Antifungal agents; Dermatomycoses; Epidemiology; Mycoses; Tinea

Resumo: Os autores relatam um caso de Tinea nigra observada em criança com oito anos de idade, do sexo masculino, procedente de Itajaí, Estado de Santa Catarina, Brasil, com lesão do tipo mácula hipercrômica, única, assintomática e localizada na região palmar direita. A lesão foi tratada com o antifúngico tópico butenafina com remissão completa do quadro e sem recorrência no acompanhamento por dois anos.
Palavras-chave: Antimicóticos; Dermatomicoses; Epidemiologia; Micoses; Tinha

Tinea nigra (TN) is a chronic and asymptomatic dermatomycosis of the stratum corneum.[1,2] The first report of clinical observation of this disease was made by Alexandre Cerqueira in 1891, in Bahia (Brazil).[1,2] TN usually affects young people under 20 years old, preferably female, manifesting clinically as a single spot with color ranging from light brown to black, located on the palm, and eventually, on the sole of the foot or atypical regions.[1,2]

The causative agent is the dematiaceous yeast *Hortaea werneckii*, which can be isolated mainly in soils with high salinity, as in dry and wet sand from the ocean beaches of Itajaí, a city located on the northern coast of Santa Catarina, Brazil.[3]

In the present study, we report a case of TN that had evolved for two years in an 8-year-old child, male, from Itajaí (SC, Brazil) and habitual frequenter of the region's beaches. On physical examination we observed the presence of a black spot with geographic shape, well-defined borders, a 4.0 by 3.0 cm diameter and located in the center of the right palmar area (Figure 1). Dermoscopy revealed blackish pigmentation, punctiform, irregularly distributed, with absence of characteristic patterns of melanocytic pigmented

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Figure 1: Detail of a single black macule, with a 4.0 x 3.0cm diameter, geographic shape, well-delimited borders, localized in the center of the right palmar region

lesion as pigmented network, globules and streaks. The direct mycological examination revealed the presence of septate and branched dematiaceous hyphae. The culture in Sabouraud-agar medium at room temperature showed the growth of bright colonies, initially of coloration white to gray, and subsequently pigmented (Figure 2). Colonies of young *Hortaea werneckii* were confirmed by microculture technique which identified annelloconidia with pigmented filaments. The lesion was treated with the topical antifungal butenafine 1% twice a day for four weeks, with complete remission and without recurrence at clinical follow-up for two years.

TN is considered a rare disease, cosmopolitan, common in coastal areas of tropical and subtropical regions.[1,2] Despite the scarcity of Brazilian publications, the authors have frequently observed the disease in the north coast of the state of Santa Catarina.[3-6] Two cases were published with forms and formations similar to forms found in Nature and were named after geographical forms as "Heart" and "Parrot's Beak".[5] "Parrot's Beak" is a rock formation located on the road to Cabeçudas beach, in the city of Itajaí, SC, Brazil.[5]

Figure 2: Culture in Sabouraud-agar medium with colonies of wrinkled aspect, shiny, humid and black

In this case report the clinical diagnosis of the disease did not present difficulties. Dermoscopy is an important auxiliary method during the physical examination for differential diagnosis of melanocytic lesions, exogenous pigmentation, fixed pigmented erythema and bruising, avoiding unnecessary surgical procedures. The dermoscopy findings demonstrating the clinical diagnosis of TN were confirmed by mycological examination with identification of the *H. weneckiii* by micromorphology of cultivation.

The disease rarely progresses to spontaneous cure.[2,6] In the asymptomatic infectious diseases such as TN, possibly the demand for medical care is lower, preventing laboratory diagnosis, and cases of spontaneous regression may be undiagnosed. Through review of the Brazilian cases, only Silva (1929) mentioned that the son of a patient affected by the disease showed spontaneous resolution of lesions in the neck.[7] Recently, the authors confirmed by mycological examination spontaneous cure of the disease in the region, demonstrating the rarity of such cases.[6]

Systemic antifungal TN therapy is not required because various topical antifungal drugs have shown good response, such as imidazoly compounds.[2-6,8,9] According to research by Lingappan and Rosen (2006), the use of ciclopirox olamine for only three days due to patient neglect also showed excellent therapeutic success.[10] It responds in an inconstant manner to undecylenic acid and tolnaftate is not effective.[8] The keratolytic substances may be associated with topical antifungal for the specific purpose of increasing therapeutic efficacy.[2] The use of isoconazole, terbinafine and amorolfine oxiconazole, in the absence of keratolytic substances by the authors has shown clinical remission of the cases treated in the Santa Catarina coast.[3-6]

The butenafine hydrochloride is a derivative of benzylamine with a mode of action similar to allylamine drugs, a new topical antifungal agent with no previous reports in the treatment of the TN disease. The authors conclude that therapy with butenafine hydrochloride 1% was effective without recurrence in follow-up conducted for two years and can be recommended as an alternative in the treatment of Tinea nigra. ❑

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