

***Tinea nigra*: A case report in Dominican Republic**

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Abstract

Tinea nigra is a superficial mycoses, it usually is asymptomatic and generally affects palms. These lesions are seen as a macula straightedge and a dark halo at the periphery. We report a case of a 6-year-old pediatric patient from Dominican Republic, which came for a dermatological consulting to Institute of Dermatology and Skin Surgery "Dr. Huberto Bogaert" with a dark macula in the left palm. A mycological study was carried out in which it was isolated *Hortaea werneckii*, confirming the clinical diagnosis of *tinea nigra* . A good response to ketoconazole cream 2% was observed.

***Tinea nigra*, *Hortaea werneckii*, dermatomycosis, Dominican Republic.**

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Introduction

Tinea nigra (black palmar *tinea*) is a rare superficial mycosis caused by *Hortaea werneckii*[1]. It was first described in Brazil Cerqueira (1891), who called keratomycosis palmaris[2] nigricans.

Hortaea werneckii is distributed in the tropics and subtrópicos.[3] is considered that this fungus is present in soil and decaying material. The inoculation occurs through trauma.[4] The incubation period is 2 to 7 weeks, affecting only the stratum corneum without any invasion of the deeper layers epidermis.[5] Brazil has reported traumatic inoculation through conejo.[6] bite. *H. werneckii* is characterized by a halophilic organism, which means it grows on substrates with high salt and low pH, besides presenting melanina.[7]

Regarding the epidemiology of *tinea nigra*, described in Southeast Asia, in Africa and in tropical and subtropical areas of America. Cases have been reported in the UK, Spain and France, and some of these cases are due to travel to areas endémicas.[8]

Among the treatments used for *tinea nigra* are topical ketoconazole, miconazole, terbinafine and butenafine accompanied by keratolytic agents, which can reduce pigmentación.[9,10,11] In some cases, it reported the resolution espontánea.[12]

Case report

Female patient of 6 years old resident of Santo Domingo, Dominican Republic, who came to see mycology department of Dermatology Institute and Skin Surgery "Prof. Dr. Hubert Bogaert "for filing a coffee stain left palm with regular boundaries, about 1.5 centimeters in diameter and asymptomatic, approximately 1 year; refers no other pathology.

The patient was treated with ketoconazole cream 2%, with complete recovery in two weeks.



Figure 1 Left palm patient showing a lesion approximately 1.5 cm in diameter.

He proceeded to take sample of the affected area by scraping with a scalpel blade No. 15, it was observed under a microscope using potassium hydroxide (KOH) 10% finding pseudohyphae yeast structures and dark green. Cultivation was done on Sabouraud agar with chloramphenicol and cycloheximide (Mycosel) for subsequent microscopic identification.

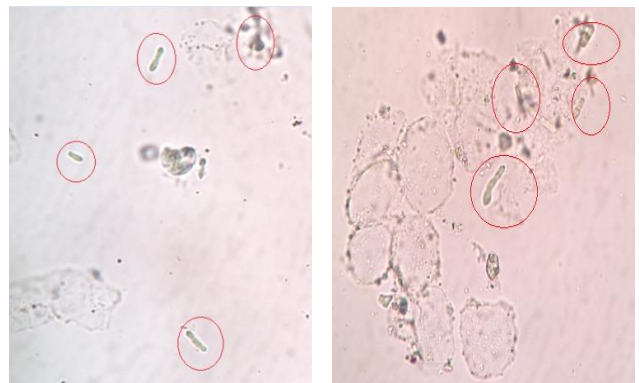


Figure 2 Yeasts with a central depression dark green

The sample was cultured on Sabouraud agar with chloramphenicol and cycloheximide (Mycosel) at 25 ° C. After about three weeks, the growth of a colony of black color, smooth and shiny surface was observed. At the microscopic examination of the culture with lactophenol blue blastoconidia presence septum with a central dark evidenced, which were consistent with the morphology of *Hortaea werneckii*.

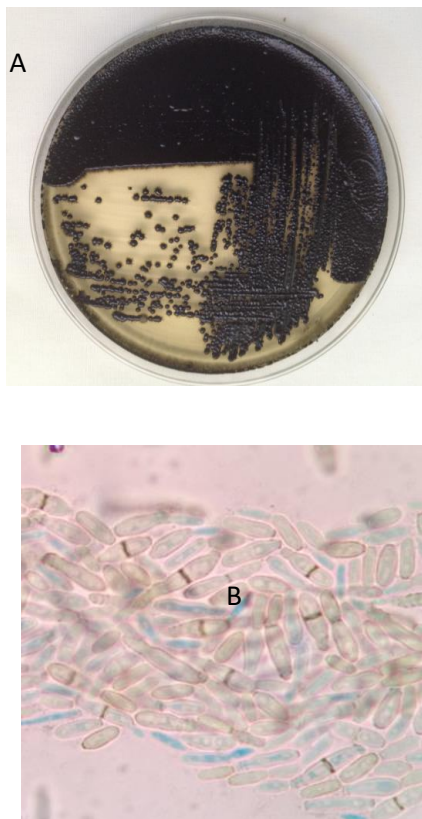


Figure 3. A) Culture of *Hortaea werneckii* agar Mycosel, **B)** Multiple blastoconidia with a central septum

Discussion

Tinea nigra is a rare dermatomycosis whose etiologic agent is the fungus *H. dematiaceus werneckii*, is a pathology usually located on the palms and soles and may be injuries from millimeters to centimeters and darker with defined limits to the affects of periphery.[13]

Preferably people who are among the first and third decades of life, 14 reported at a higher frequency Venezuela between 3-28 years, 15 as I observed in the present case. Since the lesions are asymptomatic, this problem can be underdiagnosed.[1]

From a clinical point of view, the injury was considered characteristic of this pathology, as reported in the literature; 13 however, this condition is rare in patients with dark skin, so that the case is considered atypical. Among the differential diagnoses for this pathology are melanocytic nevi, malignant melanoma, pigmentation Addison's disease, fixed pigmented erythema or exposure to químicos.[16]

There are few cases reported globally, without knowledge of the presence of the disease in Dominican Republic even if it is a tropical region with temperatures ranging between 25-35 ° C and a salt concentration is abundant.[3]

Ketoconazole cream was used 2%, with a total resolution of the lesion at 2 weeks. In some cases there has been spontaneous healing injuries.[12]

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