

# Tinea nigra in geographical forms of "heart" and "parrot beak"

## Tinea nigra nas formas geográficas em "coração" e "bico do papagaio"

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**Abstract:** Through a photographic essay, we identified similarities between hyperchromic maculas of two cases of Tinea Nigra with images of a heart-shaped mangrove called "Coeur de Voh", located on the French island of New Caledonia (Oceania) and of a rock formation called "Parrot Beak" located on Cabeçudas Beach, Itajaí, Santa Catarina State (Brazil).

**Keywords:** Dermatofungoses; Epidemiologia; Micoses; Tinea

**Resumo:** Através de ensaios fotográficos foram evidenciadas semelhanças entre máculas hipercrômicas de dois casos de Tinea nigra com imagens do manguezal denominado "Coeur de Voh", localizado na Ilha Francesa da Nova Caledônia (Oceania) e com a formação rochosa, denominada "Bico do Papagaio", localizada na Praia de Cabeçudas, Itajaí, Estado de Santa Catarina (Brasil).

**Palavras-chave:** Dermatofungoses; Epidemiologia; Micoses; Tinha

### INTRODUCTION

*Tinea nigra* (TN) is a superficial fungal, chronic and asymptomatic infection of the stratum corneum. The first clinical observation was registered in Bahia in 1891 by Alexandre Cerqueira.<sup>1,2,3</sup> The disease was only widely reported after publication in 1916 of the doctoral thesis entitled *Keratomyces nigricans Palmaris*, carried out by his son, Anthony G. Cerqueira.<sup>2,3</sup>

In 1921, Parreiras Horta isolated the fungus that causes the infection and called it *Cladosporium werneckii*, which has undergone several taxonomic changes and is currently called *Hortae werneckii*.<sup>4,5</sup>

This is a dematiaceous fungus, isolated in soil, plants, humid places and places with high salt concentration, such as beach sand.<sup>4,5</sup>

In 2006, Balestieri Filho, under the guidance of the authors, isolated the fungus *H. werneckii* in the wet and dry sands of the ocean beaches in the city of Itajaí, Santa Catarina (SC), for his final project of the Medicine Course at Univali.<sup>6</sup>

Records of occurrence of TN have been scarce.<sup>2,6,7</sup> During the 60th Congress of the SBD (Brazilian Society of Dermatology) in 2005, the authors presented 27 cases of TN observed during 10 years (1995-

2004) in SC.<sup>7</sup> The two cases reported were part of such communication and cited as forms similar to formations of nature called "heart" and "Parrot Beak."<sup>7</sup>

Both cases occurred in children, one male and one female, aged 2 and 3 years respectively and coming from Itajaí-SC.

Figure 1 corresponds to a single, asymptomatic, blackened macula of 1.0 cm in size, located at the junction of the proximal and middle phalanges of the 2nd right finger. It presented the geographical form of a "heart", resembling the registered image found in nature called "COEUR of Voh" (Figure 2).

"COEUR of Voh" is a partial aerial heart-shaped view of the mangrove of New Caledonia (Nouvelle-Caledonie, France: 20° 56'S - 164° 39'E), located on a French island of Oceania and registered by the photographer Yann Arthus-Bertrand in 1990.<sup>8</sup>

Figure 3 shows two asymptomatic, dark brown maculas located on the left palm. The smaller lesion is located on the thenar region and is 1.5 cm in size and presents the geographical form of a "Parrot's Beak", resembling the rock formation called Parrot Beak (Figure 4).

The Parrot Beak is 4.5 m high and was named

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**FIGURE 1:** Blackened, heart-shaped macula, located at the junction of the proximal and middle phalanges of the 2nd right finger



**FIGURE 2:** Partial view of the Mangrove in New Caledonia (Nouvelle-Calédonie, France) called "Coeur de Voh". Photo by Yann Arthus-Bertrand



**FIGURE 3:** Blackened maculas located on the left palm, and the one on the thenar region with the geographical form of the "Parrot Beak"



**FIGURE 4:** Rock formation called Parrot Beak on the road that connects the Cabeçudas beach to downtown Itajaí, SC, Brazil

like that for resembling the head of a giant bird, being accidentally carved in a rock during explosions in 1914 for the opening of a road to the Cabeçudas Beach, Itajaí (26° 54'06''S - 48° 39'40''W).<sup>9</sup>

In both cases, the diagnosis was confirmed by mycological examinations, identifying the fungus *H. werneckii* in the micromorphology of the Sabouraud culture medium.

Topical antifungal therapy was established: oxiconazol in the "heart" case, and isoconazol in the "Parrot Beak" case, which evolved with disappearance of the lesions after four weeks of treatment and without recurrence during the five years of follow-up.

The authors conclude that the geographical forms of the maculas of TN may reveal curious images when compared to those existing in nature. □

## REFERENCES

1. Cerqueira AG. Keratomyces nigricans palmaris [Tese]. Salvador: Faculdade de Medicina da Bahia; 1916.
2. Marques SA, Camargo RMP. Tinea nigra: relato de caso e revisão da literatura brasileira. *An Bras Dermatol*. 1996;71:431-5.
3. Silva F. A propósito da "Tinea nigra" (kerato-mycosis nigricans palmaris). *Brasil Med*. 1930;44:591-3.
4. McGinnis MR. Taxonomic of *Exophiala werneckii* and relationship to *Microsporium mansonii*. *Sabouraudia*. 1979;145-154.
5. Martins JEC, Melo NT, Heins-Vaccari EM. Tinha negra. *Atlas de micologia médica*. São Paulo: Editora Manole Ltda; 2005. p. 32-4.
6. Balestieri Filho LA. Isolamento do fungo *Hortaea werneckii* nas areias secas e úmidas das praias oceânicas de Itajaí, SC, Brasil [Monografia]. Itajaí (SC): Universidade do Vale do Itajaí; 2006.
7. Rossetto AL, Cruz RCB, Angelo MV, Correa PR. Tinea nigra: Estudo clínico e epidemiológico de vinte e sete casos observados no Vale do Itajaí, Estado de Santa Catarina, durante período de 10 anos. *An Bras Dermatol*. 2005;80(Supl 2):S124-5.
8. Yann Arthus-Bertrand, org. [Homepage] [acesso 13 jun 2010.] Disponível em: [http://www.yannarthusbertrand2.org/index.php?option=com\\_datogallery&Itemid=27&func=detail&catid=3&id=992&p=1&l=819](http://www.yannarthusbertrand2.org/index.php?option=com_datogallery&Itemid=27&func=detail&catid=3&id=992&p=1&l=819)
9. Linhares J. O que a memória guardou. Itajaí: Editora Univali, 1997. p. 127.

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