

## A case report of tinea nigra from North India

Sir,

Tinea nigra is a rare superficial fungal infection of the skin. It is caused by *Hortaea werneckii* (formerly known as *Phaeoannellomyces werneckii*, *Exophiala werneckii*, and *Cladosporium werneckii*).<sup>[1]</sup> It occurs most frequently in tropical climates and presents as asymptomatic brown to black nonscaly macules with well-defined borders resembling silver nitrate stains. Macules may be single or multiple, rounded or may have irregular shapes. Palms are most often affected, but lesions may occur on soles or other parts of the body.

A 32-year-old male resident of Pratapgarh (Uttar Pradesh, India) presented in first week of March 2008, with a nine-year history of slowly enlarging asymptomatic hyperpigmented macules on both palms [Figure 1] and soles. Patient gave history of excessive sweating. There was no family history of similar condition.



**Figure 1: Hyperpigmented macules on palms**

Examination revealed multiple, small, oval macules on palms and soles located almost symmetrically. Examination of scrapings by 10% potassium hydroxide (KOH) mount showed dematiaceous, short, septate, and branched hyphae with scattered budding cells. The scales were inoculated on Sabouraud's dextrose agar medium in duplicate. On 20<sup>th</sup> day of culture, moist, yeast-like colonies were seen which were initially brown and later changed to shiny black. With age, the colonies produced abundant aerial hyphae and turned olive to greenish black in color. Microscopically, there were brown septate mycelia with annelloconidia. These conidia were seen singly or with septation. These features were consistent with *Hortaea werneckii*.

Tinea nigra is more frequently reported in females, probably due to frequent household work and hand washing. Palms and soles are said to be the most common affected sites, although other sites such as face, axilla, and chest may also be affected. Pigmented patches of tinea nigra may be confused with junctional nevi, postinflammatory pigmentation, malignant melanoma, and melanosis of syphilis and pinta. The routine mycological and mycopathological investigations help in diagnosis of this condition. *Hortaea werneckii* receives nourishment from decomposed lipids. The hyperpigmented macules result from the accumulation of a melanin-like substance present in the fungus.

In a study of 12 patients during the period from 1972 to 2002, tinea nigra in Venezuela was found to be more prevalent among young people with fair skin who visited beaches.<sup>[1]</sup> It was noticed less frequently in the black population. Out of these 12 patients, eight had *H. werneckii* as the causal agent and two had *Stenella*

**Table 1: Reported cases of tinea nigra from India**

Center	No. of cases	Site of infection	Basis of diagnosis	Reference
Chennai	1	N A	NA	2
Chennai	1	Palm	KOH, Culture, Histopathology	3
Pondicherry	1	Palm	KOH, Culture	4
Belgaum	2	Axilla	KOH, Culture	5

NA = Information not available

*araguata*. Tinea nigra has been reported rarely from India. So far, only five cases have been reported [Table 1] and all from South India.<sup>[2-5]</sup> Its only reporting from South India may be explained on the basis of the presence of hot and humid conditions there. To the best of our knowledge, the present case is the first case of tinea nigra from North India. This may be due to its actual rarity or due to underreporting.

Topical application of effective antifungal agents usually clears the lesions within two to four weeks. Prolonged therapy may be necessary to prevent relapse. Repeated vigorous scrubbing or topical application of keratolytic agents can reduce pigmentation. Topical terbinafine applied once daily for four weeks successfully cleared the lesions in the present case as has been observed earlier.<sup>[6]</sup>

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