

TRICHOSPORON BEIGELII INFECTION IN TAMILNADU (Case report)

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Summary

White piedra occurring on pubic hairs is reported in a patient from Tamil Nadu. The patient complained of hard brown nodules along the shafts of the pubic hairs. These were shown to be composed of transparent, greenish tinged mycelial mass extending along the hair as a sheath and hyphae segmenting into round, oval or rectangular cells. *Trichosporon beigelii* was isolated in pure culture. The other cases previously reported from India are reviewed.

T. beigelii, the etiologic agent of white piedra is an yeast. Infection caused by this organism usually involves the hairs of the scalp, moustache and beard areas and is characterized by the presence of soft, white or light brown nodules of varying sizes, composed of transparent, greenish tinged mycelial masses, extending along the hair as a sheath and hyphae with arthrospores and blastospores.

Infections of the hairs of the genital or axillary region with *T. beigelii* has been rarely reported. Leao¹ in 1940 reported a case of white piedra in the hairs of the axilla. Barbosa and Renda², Patterson et al³ and Londero et al⁴ have proved this mycosis on the hairs of the pubic region in patients from North and South America.

This is the first case report of white piedra infection of the genital hair from

Tamil Nadu and probably the first from the whole of India. Hence the present case report.

Case Report

A 24 years old Hindu male, a resident of Madras city, came to the hospital complaining of numerous, hard, brown nodules along the shafts of the pubic hairs for one year. Hairs on other parts of the body were not affected.

Clinical examination revealed the presence of a number of small, fairly hard, not easily detachable, cream to light brown nodules along the shafts of the pubic hair. The infected hairs along with the nodules were sent for mycological examination.

Mycological investigation

Direct examination of the infected hair shafts in a drop of 10% KOH revealed the presence of nodules (Fig. 1). These were composed of a mass of hyaline, refractile hyphae, arthrospores and blastospores, both within and outside the hair shafts. There were no asci or ascospores.

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Culture

The hair with the nodules were inoculated on Sabouraud's dextrose agar slants with chloramphenicol and with cycloheximide. Growth was visible in a few days' time on the media containing chloramphenicol. The organism grew rapidly as a cream coloured slimy colony, later becoming finely wrinkled, raised in the center, darker and more firmly attached to the agar (Fig. 2). No growth was

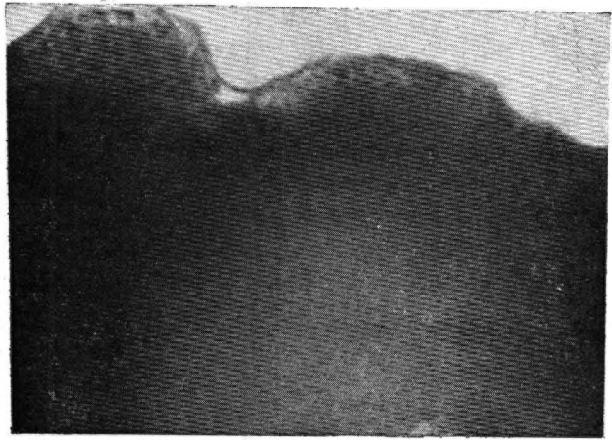


Fig. 1 Nodules on hair shaft x 450.

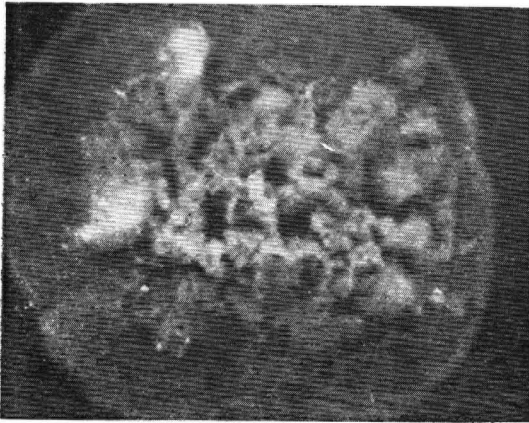


Fig. 2 30 days old colony of *Trichosporon beigelii* on Sabouraud's dextrose agar at 26°C.

obtained on the media containing cycloheximide. Culture mount revealed hyaline, septate, branching hyphae segmenting to form rectangular to globose arthrospores. In addition, globose to ovoid blastospores were also seen (Fig. 3).

Biochemical reactions

The organism did not ferment any sugars, but assimilated glucose, galactose, lactose, maltose and sucrose and utilized potassium nitrate.

The isolate was identified as *T. beigelii*.

Discussion

T. beigelii was first reported by Beigel⁶ in 1965. Since then, cases have been reported from different geographic regions of the world^{6,7,8,9}. Basu et al¹⁰ in 1970 reported the infection of scalp hair in a 40 years old South Indian female. Thammayya and Maya Sanyal¹¹ recorded a case at Calcutta in a 28 year old female. From Madras, Kamalam & Thambiah¹² reported four cases of white piedra infection of the scalp and in

one of these, the condition co-existed with black piedra infection. All their patients were males in the age group of 18-30 years.

Although the common localization of white piedra is on the moustache and beard, all cases so far reported from India had only scalp hair infection. We are reporting this case here, as the first case of white piedra infection of pubic hair in a male in India.

Surprisingly, with all the prevailing favourable conditions in India, the incidence of white piedra infection in our

country is relatively low. The lack of reports may be attributed to the asymptomatic nature of the disease, the easy curability by simple means of adaptation like shaving etc., and the fact that majority of the people in our country seldom pay any attention or seek medical advice for trivial conditions like this.

Acknowledgement

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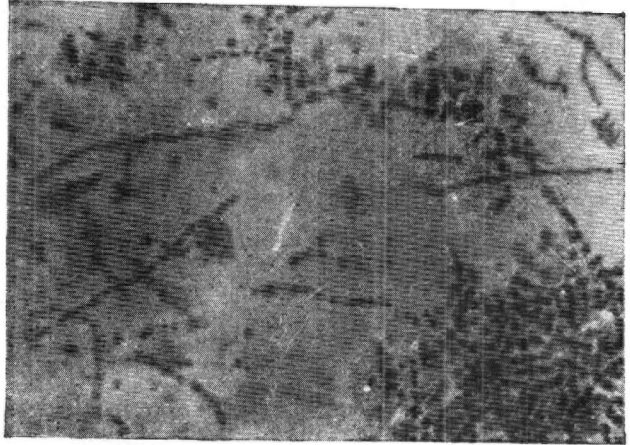


Fig. 3 Culture mount of *T. beigeli* showing arthrospores and blastospores x 450

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