

A STUDY OF DERMATOMYCOSIS

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The significance of etiologic diagnosis of dermatomycosis is obvious. The infections could be often confused with nonmycotic lesions⁸. The same species can cause more than one type of clinical lesions. The present communication deals with the results of a small scale study of dermatomycosis carried out in Baroda.

Material and Methods. One hundred patients clinically suspected to be suffering from dermatomycosis have been investigated. These were selected at random from the patients attending the Dermatologic Clinic of S. S. G. Hospital, Baroda.

The scrapings from skin and/or nails (when affected) as also from plucked hairs (in case of tinea barbae and tinea capitis) were collected, processed and cultured for isolation of pathogenic fungi adopting standard methods of clinical mycology¹. The species identification rested on the colonial morphology of the growths and microscopic characters of microconidia, macroconidia and other elements as seen in the teased mounts from primary growths and in slide culture¹. The material was also initially examined by direct 10 percent KOH wet mount.

Results. I In this series of 100 patients, 77 were males and 23 were females. The ages of the patients varied from 11 to 40 years.

The number of patients showing involvement of inguinal region (tinea cruris) was 45. Tinea corporis was noticed in 42. There were four patients suffering from tinea unguium and tinea barbae each. Two cases were of tinea capitis. Three patients showed lesions of more than one type, tinea corporis as well as tinea cruris.

Thus the number of different types of lesions encountered was 103 in 100 patients.

II. Direct KOH preparation was positive in 75 cases and 33 strains could be isolated from them; in three cases direct KOH examination was negative whereas the culture yielded positive result.

Thus totally 36 strains of dermatophytes were isolated representing only three species. The isolates included 32 strains of *Trichophyton rubrum* 3 strains of *Trichophyton mentagrophytes* and only one strain of *Epidermophyton*

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floccosum. No etiologic agent was isolated from any case of tinea barbae or tinea capitis. The distribution of isolates according to the clinical lesions is shown in Table I. It may be noted that no species of the genus *Microsporum* could be isolated from any case.

TABLE I.
Isolation of Dermatophytes from Clinical Lesions.

Clinical Types.		T. rubrum	T. mentagrophytes	Efloccosum.
Tinea cruris	(48)*	18	1	0
Tinea Corporis	(45)*	14	2	0
Tinea unguium	(4)*	0	0	1
Total:		32	3	1

* Figures in the brackets represent total number of clinical lesions encountered.

Discussion The present series is a small one. The conclusion of this small and limited study may not be valid when a bigger number of patients are examined and when more mycological and other differentiating laboratory techniques are employed. All the same overwhelming preponderance of *T. rubrum* is noteworthy. The figures of other Indian workers in the field bear out this fact e.g. 63.0 percent has been reported as the lowest and 98.7 percent as the highest relative incidence of this species.^{2, 4}

T. mentagrophytes the published reports from India are in agreement the next frequent.^{3, 9} *T. rubrum* appears to displace *T. mentagrophytes* from its first position in several countries such as U. S. A., U. K, Australia and Argentina.²

In the present series the total absence of any species of the genus *Microsporum* may appear unusual. However, in a larger series of 148 cases, Kurup and Ananthanarayan could isolate only two strains of *Microsporum* out of 60 strains of dermatophytes isolated.⁷ These two were *Microsporum canis*. Gugani et al from Delhi recovered only one strain of *Microsporum gypseum* out of 303 strains of dermatophytes isolated.⁵

Summary Thirty six strains of dermatophytes were isolated from one hundred cases of dermatomycosis. This represented only three species, the most predominant being *T. rubrum* (32 strains) followed by *T. mentagrophytes* (3 strains) and *E. floccosum* (Only one strain). No species of *microsporum* could be isolated from any case.

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