CLINICO - MYCOLOGICAL PROFILE OF SUPERFICIAL MYCOSES

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Clinico- mycological study of 2743 clinically diagnosed cases of superficial mycoses attending Skin and VD OPD of VSS Medical College during the year 1995-96 was conducted. Male predominance was observed. Highest incidence of tinea versicolor was found. *T. rubrum* was the commonest fungus isolated.

Key words : Mycoses, Dermatophytes

Introduction

Superficial mycoses refers to the diseases of the skin that are caused by fungi and exclusively invasive of the integumentary tissue. Among this group, the dermatophytoses, pityriasis versicolor and candidiasis occur most frequently. They possess the affinity for parasitizing the horny layer of the skin as well as other structures rich in keratin, such as hair and nails. They produce a demal inflammatory response with intense itching and is also of cosmetic importance. Various studies on superficial mycoses were conducted from various parts of the country.[1-6] This study had been undertaken to identify the clinical pattern of superficial mycoses and to identify the most common fungal pathogen responsible for superficial mycoses in patients attending VSS Medical college, Burla, Sambalpur.

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Materials and Methods

The study was conducted in V.S.S. Medical college and Hospital in the Department of Dermatology and Venereology during the year 1995-96. Scraping was taken from all cases and sent for KOH examination. Nail clippings were dipped in 10% KOH solution overnight for study on the next morning. KOH positive specimens were sent for culture. Tinea versicolor cases were subjected to KOH examination only as pityrosporum is a normal skin commensal, so culture was not done. If any growth was found on culture, colonial morphology, pigment production and direct examination of smear from the colony were further observed.

Results

Among the 2743 cases observed, 2065 were males, and 403 females and 275 children. It was noted that most common clinical presentation was with tinea versicolor with overall incidence of 33. 95%. The second most common presentation was with tinea corporis 24.55%. Tinea cruris

occupied the third position 16.33%. Infection occurring in multiple sites simultaneously was also very common (25%).

Most of the clinically diagnosed cases were KOH positive and culture positive as well. Some scrapings failed to grow in culture even though they were KOH positive.

The maximum incidence of superficial mycoses was found in adult males with T. versicolor topping the list. Monilial intertrigo was more in females. Monilial paronychia showed equal incidence in both sexes.

Table I.Incidence of various superficial mycoses in the study

Clinical type	Total No.	%
Tinea corporis	671	24.55
Tinea versicolor	928	23. 95
Tinea capitis	65	2.37
Tinea unguium	97	3.54
Tinea pedis	149	5.45
Tinea manum	122	4.46
Tinea cruris	469	16.88
Tinea barbae	23	0.84
Tinea faciei	9	0.32
Monilial paronychia	57	2
Monilial vulvovaginitis	18	0.65
Monilial balanitis	4	3
Monilial intertrigo	60	2.19
Grand Total	2743	100%

In this study maximum incidence of superficial mycoses was found in the age group of 15-35 years.

Vulvovaginitis was found in 18 adult females. Vulvitis was found in 30 children under age of 5. These cases may be due to threadworm, or contact dermatitis. They were treated accordingly with good result, so they were not taken for mycological study . Monilial balanitis was found in 84 males whereas vulvovaginitis was found in 18 females.

The highest incidence of superficial mycoses was found in the month of November (370) and lowest incidence in April (117).

In this study the most common isolate was *T. rubrum* which accounted for 76 % of total isolates.

Discussion

Superficial mycoses form a large group of patients attending the Dermatology OPD of VSS Medical college (16.2%). This study was done at Burla in Sambalpur district, which is situated in Western Orissa. Patients come here from most parts of Western Orissa as well as border areas of M.P and Bihar. The temperature in this area is very high most of the time. The higher temperature as well as body sweating facilitate fungal growth. The most common clinical type in our study was, T. versicolor followed by T. corporis and T. cruris. In the study of Huda et al[7] incidence of T. corporis was highest in Upper Assam. Raja and Menon [8] reported 242 clinically diagnosed cases of T. cruris patients attending Madras Medical college from March 1993 to March 1996. In our study incidence of T. cruris was very high, i.e., 407 cases during 1995-96.

Vijaykumar et al [9] reported 72 patients of T. capitis in their study from May 94. Majority of patients were children. Males and females were equally involved. In our study incidence of T. capitis was 65 during 95-96 with males 38, females 8, children 19.

Most of our patients were between 15-35 years of age. This is explained by the fact that this population group was highly active and takes part in maximum outdoor activities, viz.agriculture and manual activities.

The highest isolate in our study is *T. rubrum* which was also found in the study of Huda et al.[6]

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