

# **“CLINICO EPIDEMIOLOGICAL, MYCOLOGICAL AND THERAPEUTIC STUDY OF DERMATOPHYTOSIS IN HUNDRED NEW PATIENTS”**

## **ABSTRACT**

### **INTRODUCTION**

Dermatophytes are assuming greater significance both in developed and developing countries particularly due to advent of various immunosuppressive drugs and diseases. Hot and humid climate in the tropical and subtropical countries like India results in dermatophytosis being the most common superficial fungal skin infection in these regions. This study has been planned to know the incidence, clinical pattern of patients with first episode of superficial dermatophytosis and to find the current trend in the causative organisms. In addition I intend to observe the therapeutic response in these patients to the systemic antifungal agents namely Griseofulvin, Fluconazole, Itraconazole and Terbinafine

### **AIM OF THE STUDY**

- To study the age, sex incidence of dermatophytosis
- To study the clinical types of dermatophytosis
- To isolate the various etiological agents
- To study the clinicomycological correlation
- To study the therapeutic response of the patients with dermatophytosis to Griseofulvin, Fluconazole, Itraconazole and Terbinafine with each group comprising of 25 randomly selected.

## **METHODOLOGY**

A total of 100 clinically diagnosed patients of dermatophytosis attending the out-patient department in Mycology section, Department of Dermatology, Madras Medical College / Rajiv Gandhi Government General Hospital, Chennai- 3 during period from November 2016–September 2017 were included. Detailed history was taken. Scales from the lesions were taken and KOH wet mount and culture was done. Patients were given one of the systemic antifungal drugs namely griseofulvin, fluconazole, itraconazole and terbinafine. Evaluation is done by clinical assessment in terms of clinical score for scaling, erythema, and pruritus. The observations and data obtained from the study were compiled and analyzed.

## **RESULTS**

Culture was positive in 80 patients (80%). *Trichophyton mentagrophytes* was the most common species isolated in 53 out of 80 positive (66.2%) culture cases followed by *Trichophyton rubrum* in 21 cultures (26.3%).

## **CONCLUSION**

- The most common age group affected in this study was 21-40 years.
- Females were predominantly affected than males.
- Most of the patients belongs to middle socio economic status.
- Patients were predominantly from urban locality.
- Housewives formed the most common group followed by students, office employees and labourers.

- 47% of patients presented within 4 weeks of onset of infection.
- Diabetes mellitus was the most common association with dermatophytosis in this study.
- Family members of 31% of patients were also affected.
- Usage of tight synthetic garments (66%) and sharing of fomites plays an important role in the development of dermatophytosis in a hot and humid country like India.
- Multiple body site involvement was more common than single site infection. Tinea corporis was the most common clinical pattern followed by Tinea cruris. Tinea corporis with Tinea cruris was the commonest presentation among the combination types.
- Culture positivity was 80%.
- *Trichophyton mentagrophytes* was the most common organism isolated in this study followed by *Trichophyton rubrum*, *Trichophyton tonsurans* and *Trichophyton verrucosum*.
- Among the systemic antifungal agents, though all the four antifungal agents resulted in complete clinical cure, Itraconazole showed faster and effective clinical response with good compliance compared to terbinafine, griseofulvin and fluconazole.