

# CLINICOMYCOLOGICAL STUDY OF TINEA CORPORIS



By

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Dissertation Submitted to the  
Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore

In partial fulfillment  
of the requirements for the degree of

**DOCTOR IN MEDICINE**

In

**MICROBIOLOGY**

Under the guidance of

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**Sattur, Dharwad-09**

**2015**

**Rajiv Gandhi University of Health Sciences, Karnataka.**

## ABSTRACT

**Background and Objectives:** Tinea corporis is the most common form of dermatophytosis where the fungi dwell on the keratin from the skin. The aim of the study was to evaluate clinically diagnosed cases of tinea corporis by standard microbiological methods, to isolate and identify the dermatophytes, to determine the antifungal susceptibility testing for *T. rubrum* isolates by agar dilution method for fluconazole and ketoconazole and to correlate clinical and laboratory diagnosis.

**Methods:** A total of 100 clinically suspected cases of tinea corporis were included in the study. Skin scrapings were aseptically collected and subjected to KOH preparation, Calcofluor White and culture. Identification of the dermatophytes was based on colony morphology, microscopic examination by tease mount, slide culture and urease test. Antifungal susceptibility testing of *T. rubrum* was performed for fluconazole and ketoconazole by agar dilution method.

**Results:** Highest incidence was seen in the age group 31–45 years with 34%. Males (56%) were more commonly affected than females (44%). Tinea corporis was most commonly seen in labourers (26%). Fungi were demonstrated in 57 cases by direct microscopy and by 41 in culture. Five species were isolated. *T. rubrum*, (39%) was the commonest, followed by *T. mentagrophytes* (29.2%), *E. floccosum* (21.9%), *M. gypseum* (4.87%) and *T. tonsurans* (4.87%). *T. rubrum* was susceptible to both fluconazole and ketoconazole.

**Conclusion:** *Trichophyton rubrum* is the most common species causing tinea corporis. In India, it is likely to continue as the dominant species. Ketoconazole and fluconazole are effective drugs for the treatment of tinea corporis. Antifungal drug resistance to azoles is not a major issue with dermatophytes. Having a baseline data

on epidemiological aspects and antifungal susceptibility may help the clinicians in deciding the antifungal policy for empiric therapy.

**Key words:** Dermatophytes, Fluconazole, Ketoconazole, Tinea corporis, *Trichophyton rubrum*.