ABSTRACT

TITLE OF THE STUDY:

“Study of the pattern of superficial dermatophytic infections of the skin”

BACKGROUND AND OBJECTIVES:

Dermatophytosis is a general and public health problem. The dermatophyte is the most common fungal infection of the skin as it affects majority of the population and its prevalence is high worldwide.

The present study is done

1. To study the pattern of superficial dermatophytic infections of the skin in relation to demographic factors.

2. To find out the causative fungal organism

3. To identify the factors responsible for transmission of superficial dermatophytic infections of the skin

METHODS:

After approval of institutional ethical committee, a total of 115 patients were included in the study who had clinical features suggestive of superficial dermatophytic infection of the skin on clinical examination. The skin scrapings obtained were examined with 10% KOH under direct microscopy for evidence of fungal elements and all the KOH positive scraping were
planted for culture by furrowing it into the medium with a scalpel. They were inoculated in room temperature for 4 weeks. Precise identification was accomplished by examination of section of sporulation area of colony under microscope. When there was sporulation and pigment formation, a lactophenol cotton blue (LCB) mount of the growth was examined. Various characteristics were noted - colour, texture, rate of growth, pigments, microscopic morphology(size, shape, arrangement of spores, types of hyphal appendages and hyphal modifications).

**STATISTICAL ANALYSIS:**

The data was analysed by SPSS 17.0 with Chi-square test

**RESULTS:**

1. In this present study, it was observed that majority of the patients were females (54.78%) and males comprised the rest of the patients (45.22%)

2. Majority of patients diagnosed were in the age group of 10-20 years (44.3%) followed by 21-40 years of age.

3. Most of the patients were students (46.09%) and housewives (25.22%) with itching as most common clinical presentation.

4. In this study, 12.17% of the patients had past history of dermatophytosis within the last one year.

5. Family history was present in 45.22% of the patients.
6. It was observed in this study that 43.48% had a history of sharing fomites including towels, soaps, footwear. Sharing of more than two fomites was present in 29.56% of our patients.

7. In this study, 28.70% used common pool as source of bathing. 71.30% of the patients used well water.

8. In this study, 19.13% had history of pets in their house and dogs were present in 13.91% of patients.

9. On examination scaly patches was the most common presentation (42.61%) followed hyperpigmented plaques with papules (25.22%).

10. Tinea corporis was the most common clinical diagnosis (32.17%) followed by a combination of tinea corporis and tinea cruris (30.43%)

11. Fungal elements on direct microscopic examination with KOH was present in 64.35% of the patients

12. Microbiological cultures were positive in only (45.95%) of the patients and all these patients showed positivity by direct microscopy.

13. T. rubrum (64.71%) was the most common species isolated followed by T. mentagrophyte (35.29%)

**IMPRESSION:**

This study proves that sharing of fomites, bathing in common pool and pets at home have role in spread of superficial dermatophytic infections of the skin. This can be proved in large studies in future.

**Key words:** superficial dermatophytic infection, sharing of fomites.