TITLE OF THE ABSTRACT: CLINICOMORPHOLOGICAL STUDY OF MYCOTIC INFECTIONS OF SKIN IN IMMUNOCOMPETENT AND IMMUNOCOMPROMISED PATIENTS: A 7-YEAR RETROSPECTIVE STUDY.

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OBJECTIVES:

To classify and assess the prevalence of cutaneous mycoses, to compare the clinicomorphological features between immunocompetent and immunocompromised patients and to find out the correlation between histopathology and mycological culture report.

Settings and Design: This is an observational study done in a tertiary care centre, South India.

METHODS:

A retrospective analysis of clinical and histomorphological features of cutaneous mycoses were done from Jan 2008 to Dec 2009 & Jan 2011 to Dec 2015. Statistical analysis used:

Pearson's Chi square test, univariate & multivariate analyses were used for analysis.

RESULTS:

Patients aged 1 year- 83 years, with male preponderance (63%). Among the total 232 cases, 30.2% were found to be immunocompromised and 69.8% were immunocompetent. Diabetes(29%) was found to be the most common immunocompromised condition followed by HIV-AIDS (21%). Lower extremity was the most common site involved in immunocompetent patients and face & neck region was the most common site involved in immunocompromised patients, skin lesion was the most common symptom with macule/papule being the most common type of skin lesion. Superficial fungi were the most common category seen in both immunocompetent, 120 (74.08%) and immunocompromised, 34 (61.4%) patients. Dermal/cutaneous fungi, 22 (31.43%) and disseminated fungi, 2 (2.86%) were found to be seen more commonly in immunocompromised patients. Dermatophytes were the most common organisms observed in 114 cases (48.27%), of which 86 (51.85%) were immunocompetent and 28 (40%) were immunocompromised.

CONCLUSION:

There was a male preponderance for cutaneous mycoses. The most common age of presentation in our cohort was found to be 20-40 years. In immunocompromised patients the duration of symptoms was mostly <6 months (65.71%) when compared to immunocompetent patients who generally had a chronic course. Fungal infections were categorized into superficial, dermal/cutaneous, subcutaneous and disseminated types. Superficial mycoses (70.25%) was the predominant category observed in our cohort with dermatophytes (48.27%) being the most common fungal organisms identified in all age groups and both the genders .Histoplasmosis was seen to be more commonly associated with HIV-AIDS. The most common histological features in all the four different types of cuatneous mycoses were hyperkeratosis and hyperplasia. In our study, culture was found to be specific but not as sensitive as biopsy in all the four categories of fungal infection.

<u>Key-words</u>: Cutaneous mycoses, immunocompetent and immunocompromised patients, clinicomorphological features of cutaneous mycoses, dermatophytoses.