

Patterns of Psoriasis in Patients Attending DVL OPD at Osmania General Hospital - A Prevalence Study

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ABSTRACT

Introduction: Psoriasis is a chronic disorder with polygenic predisposition combined with triggering environmental factors such as trauma, infection, or medication. Its prevalence and pattern are influenced by diverse genetic, ethnic and environmental factors. This study was undertaken to study the prevalence of the disease and different patterns of psoriasis at Osmania General Hospital, a tertiary care hospital in Hyderabad, Telangana, India.

Material and methods: This is a cross sectional observational study in which clinical data of all patients with psoriasis who attended outpatient Department of Dermatology, between July 01, 2016 to June 30, 2017 were analyzed. A total of 1872 patients formed the study subjects. Diagnosis was made on clinical grounds and laboratory investigations and skin biopsy.

Results: Out of a total 72,000 patients seen in outpatient Department of Dermatology during study period, 1872 patients were suffering from psoriasis constituting 2.6% of all skin OPD patients. Male-to-female ratio was 1.5:1. Chronic plaque type psoriasis (72%) was commonest morphological type. Pustular and erythrodermic psoriasis accounted for less than 1% cases each. Arthritis was seen in 0.64% cases. Pustular psoriasis was seen in 0.4% cases.

Conclusion: Psoriasis is a common dermatological disease in Hyderabad. Our data correlates with previous hospital-based prevalence studies of psoriasis.

Keywords: Psoriasis, Pattern, Prevalence, Osmania General Hospital

INTRODUCTION

Psoriasis is a chronic disorder with polygenic predisposition combined with triggering environmental factors such as trauma, infection, or medication.¹ The characteristic lesion is a sharply demarcated erythematous plaque with micaceous scale, and the plaques may be localized or widespread in distribution. Psoriasis is a systemic disease process in which up to 20–30% of the patients have or will develop psoriatic arthritis. In addition, in patients with moderate to severe psoriasis, there is an increased relative risk for metabolic syndrome and atherosclerotic cardiovascular disease. Psoriasis also has a significant impact on patients' quality of life, and in surveys, patients feel that the current treatments, although often effective, do not provide a satisfactory long-term solution. Its prevalence and pattern are influenced by diverse genetic, ethnic and environmental factors.¹⁻³ However there was no study being conducted before for prevalence of patterns of psoriasis in Hyderabad. We decide to study at Osmania General Hospital, a tertiary care hospital situated at heart of Hyderabad.

MATERIAL AND METHODS

The study was cross sectional observational study. Patients attending the DVL opd at Osmania General Hospital during the period of one year starting from July 01, 2016 to June 30, 2017 formed the study population. The patients were included in the study after taking a written and informed consent.

Inclusion criteria: All newly diagnosed psoriasis cases during study period. A total of 1872 patients formed the study subjects.

Most of the cases were diagnosed clinically and supported by histo-pathologic examination of biopsies taken from the patients where doubt existed. For each patient clinical examination of the skin, genitalia, mucous membranes, hair and nails was performed. Sites and distribution of the lesions were noted.

Exclusion criteria: Cases with doubtful diagnosis were excluded from the study. Patients not willing to give consent were excluded.

STATISTICAL ANALYSIS

Microsoft office 2007 was used for the analysis. Descriptive statistics like mean and percentages were used for the analysis.

RESULTS

72,000 patients attended DVL out patient department of Osmania General Hospital, during the study period from July 01, 2016 to June 30, 2017. Out of which 1872 patients were diagnosed with psoriasis. The data that was generated was analyzed using computer based Statistical Package for the Social Sciences. Qualitative variables were presented as percentages and tables.

Out of 1872 psoriasis patients 1128 were male and 744 were female with a male to female ratio of 1.5:1 (table-1).

Psoriasis was most common in 41-60 years age group, with 38.72% of the total patients having their disease onset in this age group (table-2).

Chronic plaque psoriasis was the commonest pattern with 1362 of the total 1872 patients, constituting 72%. Least

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common pattern was pustular psoriasis with only 8 cases observed during a study period of 1 year. 4.48% of cases presented with exclusive nail psoriasis without any skin manifestations (table-3).

DISCUSSION

Psoriasis is a disease commonly encountered in dermatology practice. Diverse environmental, genetic and other factors influence the variations in prevalence of psoriasis and the variations in the different patterns of psoriasis.^{1,2} During the study period, a total of 72,000 patients took treatment from Skin OPD of Osmania general hospital. Out of these, the patients diagnosed with psoriasis were 1,872 translating to a prevalence rate of 2.6% for psoriasis. This is comparable to the prevalence rate of 0.44% to 2.8% described for psoriasis in India.^{1,3-6} Males outnumbered females with a male-to-female ratio of 1.5:1. Other studies by Palit et al and Dogra et al also reported similar male preponderance.⁷⁻¹² The age group most commonly affected was fourth to sixth decade accounting for 38.7% of total cases. This was consistent with the age distribution of psoriasis reported in other studies. Psoriasis was relatively uncommon in children and elderly. The most common morphological type of psoriasis in our study was chronic plaque type psoriasis with a percentage of 72% of psoriasis cases. This is similar to data seen in study by Bedi et al and Dogra et al.⁸⁻¹² The second most common type of psoriasis in our study was palmoplantar psoriasis. Palmoplantar psoriasis accounted for 12.44% of the total psoriasis cases. This was more than that reported by Bedi et al (2%).⁹ Quality of life was affected by palmoplantar psoriasis. Pain due to fissures, itching and difficulty in doing daily activities caused significant morbidity. Friction due to day to day activities and might be the cause for increased prevalence of palmoplantar psoriasis. Repeated trivial trauma due to wearing ill fitting and open footwear and barefoot walking might be the triggering factors for plantar involvement.

Others forms of psoriasis were relatively uncommon with guttate psoriasis constituting about 3.68% of total cases studied. It was more common in children and was associated with upper respiratory tract infection. Sebopsoriasis and inverse psoriasis accounted around 2% each. Sebopsoriasis being more commonly reported in pubertal age group.

Nail involvement is a common feature of psoriasis and affects approximately 10-78% of patients with 5-10% of patients having isolated nail psoriasis.¹⁴ In our study, nail was involved in 62.2% patients. Isolated nail involvement was seen in 4.48% cases, which is in agreement with the 5.1% reported by Kaur et al.⁸

The least common pattern of psoriasis in our study was pustular psoriasis with only 0.42% of total cases. Other less common types were erythrodermic psoriasis (0.96%) and psoriatic arthritis (0.64%) this is similar to those reported in other studies.

CONCLUSION

Psoriasis is a common disease in patients attending DVL

Males	Females
1128 (60.25%)	744 (39.75%)

Table-1: Gender wise distribution of psoriasis patients

Age in years	No. of Patients, n (%) N =1872
1-10	84 (4.48%)
11-20	270 (14.42%)
21-40	592 (31.62%)
41-60	725 (38.72%)
60-80	190 (10.14%)
>80	11 (0.58%)

Table-2: Age wise distribution of psoriasis patients

Patterns of Psoriasis	No. of patients, n (%) N =1872
Chronic plaque psoriasis	1362 (72.75%)
Palmoplantar psoriasis	233 (12.44%)
Guttate psoriasis	69 (3.68%)
Sebopsoriasis	45 (2.40%)
Inverse psoriasis	41 (2.19%)
Pustular psoriasis	8 (0.42%)
Erythrodermic psoriasis	18 (0.96%)
Nail psoriasis	84 (4.48%)
Psoriatic arthritis	12 (0.64%)

Table-3: Patterns of psoriasis among patients.

OPD in Hyderabad region of Telangana. The prevalence of different patterns of psoriasis are similar to prevalence reported in other studies.

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