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Original Research

Pattern of Psoriasis in a Tertiary Care Hospital: A Cross-Sectional Study.

Dr. Aruna Lavidya 

Assistant Professor Department of DVL, Prathima Relief Institute of Medical sciences, Warangal.

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Abstract

Background: Psoriasis is a chronic inflammatory skin disorder characterized by erythematous plaques covered with silvery scales. It is associated with significant morbidity and may be accompanied by systemic comorbidities such as hypertension, diabetes mellitus, and psoriatic arthritis. Understanding the clinical pattern of psoriasis in tertiary care hospitals is important for better disease management and healthcare planning. **Aim:** To study the demographic profile, clinical patterns, and associated comorbidities among patients with psoriasis attending a tertiary care hospital. **Materials and Methods:** A hospital-based cross-sectional observational study was conducted in the Department of Dermatology at a tertiary care hospital over a period of one year. A total of 120 patients clinically diagnosed with psoriasis were included in the study. Demographic details, clinical type of psoriasis, site of involvement, nail changes, family history, and associated comorbidities were recorded using a structured proforma. Data were analyzed using descriptive statistics and presented as frequencies and percentages. **Results:** Among the 120 patients studied, the majority belonged to the 31-40 years age group (28.3%). Males constituted 60% of the study population, with a male-to-female ratio of 1.5:1. Chronic plaque psoriasis was the most common clinical type observed (68.3%), followed by guttate psoriasis (11.7%), pustular psoriasis (8.3%), inverse psoriasis (6.7%), and erythrodermic psoriasis (5%). The most commonly affected sites were the extensor surfaces (70%) and scalp (55%). Nail involvement was observed in 25% of patients. Hypertension (20%) and diabetes mellitus (15%) were the most common associated comorbidities. **Conclusion:** Chronic plaque psoriasis was the most prevalent clinical form observed in this study, with a higher occurrence among males and individuals in the third and fourth decades of life. The presence of associated comorbidities highlights the need for comprehensive evaluation and multidisciplinary management of psoriasis patients.

Keywords: Psoriasis, Chronic plaque psoriasis, Dermatology, Comorbidities, Tertiary care hospital.

INTRODUCTION

Psoriasis is a chronic, immune-mediated inflammatory skin disorder characterized by erythematous plaques with silvery scales. It affects approximately 2-3% of the global population and represents a significant dermatological burden worldwide. The disease is multifactorial in origin, involving genetic predisposition, environmental triggers, and immune dysregulation. Psoriasis commonly presents in several clinical forms including plaque psoriasis, guttate psoriasis, pustular psoriasis, erythrodermic psoriasis, and inverse psoriasis. Among these, chronic plaque psoriasis is the most prevalent form. The disease can occur at any age but shows bimodal peaks, typically in early adulthood and later in life.

Patients with psoriasis often experience systemic comorbidities such as psoriatic arthritis, metabolic syndrome, diabetes mellitus, hypertension, and cardiovascular diseases. The chronic nature of the disease significantly affects the quality of life of patients due to social stigma, psychological stress, and physical discomfort. In India, the prevalence of psoriasis ranges from 0.4% to 2.8%, with variations depending on geographic and environmental factors. Understanding the pattern of psoriasis in tertiary care hospitals is important for improving disease management, identifying associated risk factors, and planning preventive strategies. Therefore, the present study was conducted to evaluate the clinical patterns, demographic distribution, and associated factors of psoriasis among patients attending the dermatology outpatient department of a tertiary care hospital.

Address for Correspondence Dr. Aruna Lavidya, Department.

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MATERIALS AND METHODS

A hospital-based cross-sectional observational study.

Study Setting

The study was conducted in the Department of Dermatology at a tertiary care teaching hospital over a period of 12 months.

Study Population

All patients clinically diagnosed with psoriasis attending the dermatology outpatient department during the study period were included.

Sample Size

A total of 120 patients diagnosed with psoriasis were included in the study.

Inclusion Criteria

- Patients of all age groups diagnosed with psoriasis.
- Patients willing to participate and provide informed consent.

Exclusion Criteria

- Patients with other dermatological conditions mimicking psoriasis.
- Patients unwilling to participate in the study.

Data Collection

Detailed demographic and clinical information was collected using a structured proforma including:

- Age
- Gender
- Occupation
- Duration of disease
- Family history
- Type of psoriasis
- Site of involvement
- Presence of nail changes
- Associated comorbidities

Clinical examination was performed by a dermatologist to confirm the diagnosis and classify the type of psoriasis.

Statistical Analysis: Data were entered into Microsoft Excel and analyzed using descriptive statistics. Results were expressed as frequencies, percentages, means, and standard deviations.

RESULTS

Table 1: Age Distribution of Study Participants (n = 120)

Age Group (Years)	Number of Patients	Percentage (%)
≤20	12	10.0
21-30	27	22.5
31-40	34	28.3
41-50	24	20.0
51-60	15	12.5
>60	8	6.7
Total	120	100

A total of 120 patients with psoriasis were included in the study. The majority of patients were in the 31-40 years age group (28.3%), followed by 21-30 years (22.5%) and 41-50 years (20%).

Table 2: Gender Distribution of Patients

Gender	Number of Patients	Percentage (%)
Male	72	60
Female	48	40
Total	120	100

Out of 120 patients:

- 72 (60%) were males
- 48 (40%) were females

The male to female ratio was 1.5:1.

Table 3: Clinical Types of Psoriasis

Type of Psoriasis	Number of Patients	Percentage (%)
Chronic Plaque Psoriasis	82	68.3
Guttate Psoriasis	14	11.7
Pustular Psoriasis	10	8.3
Inverse Psoriasis	8	6.7
Erythrodermic Psoriasis	6	5.0
Total	120	100

The most common clinical type observed was chronic plaque psoriasis, seen in 82 patients (68.3%).

Other types included:

- Guttate psoriasis - 14 (11.7%)
- Pustular psoriasis - 10 (8.3%)
- Inverse psoriasis - 8 (6.7%)
- Erythrodermic psoriasis - 6 (5%)

Table 4: Site of Involvement in Psoriasis Patients

Site of Involvement	Number of Patients	Percentage (%)
Extensor Surfaces	84	70
Scalp	66	55
Trunk	48	40
Nails	30	25
Palms and Soles	20	16.7

Site of Involvement

The most commonly affected sites were:

- Extensor surfaces - 70%
- Scalp - 55%
- Trunk - 40%
- Nails - 25%

Table 5: Associated Comorbidities Among Psoriasis Patients

Comorbidity	Number of Patients	Percentage (%)
Hypertension	24	20
Diabetes Mellitus	18	15
Psoriatic Arthritis	12	10
Dyslipidemia	10	8.3
Obesity	8	6.7

Nail involvement was observed in 30 patients (25%), with pitting being the most common finding.

DISCUSSION

Psoriasis is a chronic inflammatory disorder with variable clinical presentations and significant impact on patients' quality of life. The present study evaluated the demographic and clinical patterns of psoriasis in patients attending a tertiary care hospital. In this study, the majority of patients were in the third and fourth decades of life, which is consistent with previous studies conducted in India. The male predominance observed in this study is also similar to findings reported by several researchers.

Chronic plaque psoriasis was the most common type observed, accounting for more than two-thirds of cases. This finding aligns with global epidemiological studies which report plaque psoriasis as the predominant clinical subtype. The most commonly affected sites were the extensor surfaces and scalp, which is characteristic of psoriasis. Nail involvement was present in approximately one-fourth of patients, similar to other studies that reported nail changes in 20-30% of psoriasis cases.

Family history was noted in a smaller proportion of patients, indicating the genetic component of the disease. Additionally, comorbidities such as hypertension and diabetes mellitus were frequently observed, supporting the association between psoriasis and metabolic disorders. These findings highlight the importance of comprehensive evaluation and multidisciplinary management of psoriasis patients, particularly in tertiary care settings.

CONCLUSION

Psoriasis is a common chronic dermatological condition with varied clinical presentations. The present study demonstrated that chronic plaque psoriasis is the most prevalent form, with the highest occurrence among individuals in the third and fourth decades of life. Male predominance was observed, and the extensor surfaces and scalp were the most frequently affected sites.

The study also identified a significant association between psoriasis and comorbid conditions such as hypertension and diabetes mellitus. Early diagnosis, regular follow-up, and holistic management are essential to reduce disease burden and improve the quality of life of patients. Further large-scale studies are recommended to better understand the epidemiology and risk factors associated with psoriasis.

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