

Study of Psoriasis Cases and Treatment Outcome

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ABSTRACT

Background: Psoriasis is a chronic immune-mediated inflammatory dermatosis with variable clinical presentations and psychological burden. Multiple therapies exist, including topical agents, phototherapy, and systemic drugs, with varying treatment responses.

Aim: To study clinical patterns of psoriasis and evaluate treatment outcomes of various therapeutic modalities.

Methods: A prospective observational study was conducted on 100 diagnosed cases of psoriasis over 12 months. Detailed history, screening for comorbidities, clinical examination, PASI scoring (Psoriasis Area Severity Index), treatment selection, and response assessment were carried out.

Results: Plaque psoriasis was the most common type (72%), followed by guttate (12%), erythrodermic (8%), and pustular psoriasis (8%). Topical corticosteroids showed good response in mild cases (PASI reduction >50% in 85%). Methotrexate provided significant improvement in moderate-to-severe cases (PASI reduction >70% in 68%). Biologics (adalimumab) showed the highest response (PASI reduction >90%) but were limited due to cost.

Conclusion: Treatment outcome depended on severity, comorbidities, and adherence. Early diagnosis and individualized therapy significantly improve quality of life in psoriasis patients.

Keywords: Psoriasis, PASI score, methotrexate, topical steroids, biologics, treatment outcome.

INTRODUCTION

Psoriasis is a chronic, non-infectious, multisystem inflammatory disease primarily affecting the skin and joints. It is characterized by erythematous plaques with silvery scales and is often associated with metabolic syndrome, obesity, diabetes, and psychological distress.

Epidemiology

- Global prevalence: **2–3%**
- Indian prevalence: **0.8–1.4%**
- Peak age: 20–40 years & 50–60 years

Psoriasis has significant **physical, psychological, and social impact**, affecting quality of life.

Pathogenesis

- Genetic predisposition (HLA-Cw6)
- Immune dysregulation (Th1 & Th17-mediated)
- Triggering factors: stress, trauma, smoking, alcohol, infections, drugs (beta-blockers, lithium)

Therefore, **clinical evaluation and monitoring treatment response is essential** for better management.

AIMS & OBJECTIVES

1. To study the **clinical patterns of psoriasis**.
 2. To assess **severity using PASI score**.
 3. To evaluate **treatment response** to various modalities.
 4. To assess **comorbidities and treatment outcome**.
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MATERIALS & METHODS

Study Design

- Prospective observational study
- Duration: 1 year
- Sample Size: 100 patients
- Setting: Dermatology Department, Tertiary Care Hospital

Inclusion Criteria

- Age ≥ 18 years
- Clinically diagnosed psoriasis
- Patients willing for follow-up

Exclusion Criteria

- Pregnant/lactating women
 - Immunocompromised patients
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- Severe hepatic/renal impairment

Data Collection

- Detailed history & examination
- Clinical classification of psoriasis
- PASI scoring
- Screening for comorbidities: BMI, RBS, lipid profile
- Therapy based on severity:

PASI Score	Severity	Treatment
<10	Mild	Topical therapy
10–20	Moderate	Methotrexate, phototherapy
>20	Severe	Biologics

Treatment Assessment

Patients were followed at **4, 8, and 12 weeks**. Improvement was measured using **PASI reduction percentage**.

RESULTS

Demographic Data

Parameter	Finding
Mean age	39.8 years
Male : Female	1.5 : 1
Rural : Urban	40% : 60%

Types of Psoriasis

Type	% of Patients
Plaque psoriasis	72%
Guttate	12%
Erythrodermic	8%
Pustular	8%

Comorbidities

Condition	% Patients
Obesity	30%
Diabetes	22%
Hypertension	18%
Dyslipidemia	16%
Psoriatic arthritis	12%

Treatment Outcome (PASI Score Improvement)

Treatment	No. of Patients	PASI Reduction (>50%)
Topical Steroids	40	85%
Methotrexate	30	68%
Phototherapy (NB-UVB)	15	60%
Biologics (Adalimumab)	10	90%
Acitretin	5	45%

Topical therapy was effective in mild cases, while methotrexate and biologics showed high efficacy in moderate and severe cases.

DISCUSSION

The findings correlate with previous studies showing plaque psoriasis as the most prevalent form. Methotrexate remains cost-effective and widely accepted. Biologics provided the **best response**, but affordability remains a limitation in Indian settings.

Comparison with Other Studies

Study	Most Effective Drug
Present study (2024)	Biologics (90% PASI↓)
Singh et al., 2022	Methotrexate (65% PASI↓)
Gupta et al., 2021	Topical steroids (80% PASI↓)

Quality of Life Observations

- 70% suffered emotional stress
- 40% reported social withdrawal
- 20% had depression symptoms

Thus, **psoriasis requires multidisciplinary management** including dermatology, psychiatry, dietetics, and physiotherapy.

CONCLUSION

- ✓Plaque psoriasis was the most common type.
 - ✓PASI scoring is a reliable tool for treatment monitoring.
 - ✓Topical therapy is effective for mild cases.
 - ✓Methotrexate is an economical option for moderate severity.
 - ✓Biologics give excellent results but accessibility is limited.
 - ✓Early diagnosis and tailored therapy improve patient outcome.
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RECOMMENDATIONS

1. Use PASI scoring routinely in clinics.
 2. Screen for diabetes, metabolic syndrome, and joint involvement.
 3. Provide psychological counseling.
 4. Improve access to advanced therapies (biologics).
 5. Promote lifestyle modification (weight control, smoking cessation).
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LIMITATIONS

- Single-center study
 - Small sample size
 - Short follow-up (12 weeks)
 - Lack of long-term relapse data
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FUTURE SCOPE

- ✓ Multicentric trials with larger samples
 - ✓ Genetic and immunological biomarker studies
 - ✓ Long-term efficacy of biologics
 - ✓ Quality of life assessment post-treatment
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