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# **Original Research**

# Comparison of management of cases of psoriasis

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#### ABSTRACT:

**Background:** Psoriasis is a common chronic inflammatory, immune - mediated disease that predominantly affects the skin and joints. The present study was conducted to compared management of cases of psoriasis. **Materials & Methods:** 80 patients of psoriasis of both genders were divided into 2 groups of 40 each. Psoriasis area severity index (PASI) was assessed in both groups. **Results:** Common clinical features were scalingseen in 15 in group I and 13 in group II, red lesion seen 11 in group I and 12 in group II, burning pain seen 7 in group I and 10 in group II, thick lesions seen 9 in group I and 5 in group II, itchingseen in 26 in group I and 23 in group II and joint pain seen in 11 in group I and 13 in group II respectively. The difference was non- significant (P> 0.05). **Conclusion:** Authors found that Methotrexate found to be superior than clobetasol propionate. Combination therapy is more effective in management of cases of psoriasis. **Key words:** clobetasol propionate, Psoriasis, PASI

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# **INTRODUCTION**

Psoriasis is a common chronic inflammatory, immune - mediated disease that predominantly affects the skin and joints. Psoriasis occurs because the overactive immune system speeds up skin cell growth. Normal skin cell completely grows and shed in a month.<sup>1</sup> With psoriasis, skin cell does this in only three or four days. Instead of shedding, the skin cell piles up on the surface of the skin. Some people report that psoriasis plaque itch, burn and sting. Plaques and scales may appear on any part of the body. Although they are commonly found on elbows, knees, and scalp. Inflammation caused by psoriasis can impact other organs and tissues in the body. The disease is triggered by several factors and tends to worsen with time. Various factors that lead to the start of psoriasis.<sup>7</sup> The sites on the skin, which are exposed to the friction or minor trauma, such as the extensive areas of knees, elbow, etc are the areas prone to psoriasis.<sup>2</sup>

World Health Organization (WHO) defines QOL as "Individual perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.<sup>3</sup> The conventional treatment for psoriasis depends upon the severity and location of

lesions. First line topical treatments were suggested for mild to moderate psoriasis.<sup>4</sup> This includes corticosteroids, vitamin D3 analogues and calcipotriol betamethasone dipropionate combination products. Calcipotriol, a vitamin D3 analogue is the choice for plaque psoriasis and scalp psoriasis.<sup>5</sup>The present study was conducted to compare management of cases of psoriasis.

# **MATERIALS & METHODS**

The present study comprised of 80 patients of psoriasis of both genders. All enrolled patients gave their consent.

Data such as name, age, gender etc. was recorded. Patients were divided into 2 groups of 40 each. Patients ingroup Ireceived clobetasol propionate (0.05%) + salicylic acid (3%) lotion for scalp application and betamethasone valerate (0.05%) cream for body surface application and patients in group II receivedtablet methotrexate (7.5 mg/week) along with topical treatment; clobetasol propionate (0.05%) + salicylic acid (3%) lotion for scalp application and betamethasone valerate (0.05%) cream for body surface application. In both groups, Psoriasis area severity index (PASI) was assessed. All the recruited patients were followed up at 1 month and 6 months of treatment. Data thus obtained were

subjected to statistical analysis. P value < 0.05 was considered significant.

#### **RESULTS** Table I Distribution of patients

Groups	Group I	Group II			
Drug	clobetasol propionate (0.05%) + salicylic acid	Methotrexate+ clobetasol propionate (0.05%)			
	(3%) lotion+ betamethasone valerate $(0.05%)$	+ salicylic acid (3%) lotion+ betamethasone			
		valerate (0.05%) cream			
M:F	20:20	16:24			

Table I shows that group I had 20 males and 20 females and group II had 16 males and 24 females.

# **Table II Comparison of PASI score**

PASI	Group I	Group II	P value			
Baseline	13.8	15.5	0.02			
1 month	13.0	12.2	0.71			
2 months	12.5	7.84	0.01			

Table II shows that mean PASI score was 13.8 and 15.5 at baseline, 13.0 and 12.2 at 1 month and 12.5 and 7.84 at 2 months in group I and group II respectively. The difference was significant (P < 0.05).

# **Table III Assessment of clinical features**

<b>Clinical features</b>	Group I	Group II	P value
Scaling	15	13	0.91
Red lesion	11	12	
Burning pain	7	10	
Thick lesions	9	5	
Itching	26	23	
Joint pain	11	13	

Table II, graph I shows that common clinical features were scaling seen in 15 in group I and 13 in group II, red lesion seen 11 in group I and 12 in group II, burning pain seen 7 in group I and 10 in group II, thick lesions seen 9 in group I and 5 in group II, itching seen in 26 in group I and 23 in group II and joint pain seen in 11 in group I and 13 in group II respectively. The difference was non-significant (P> 0.05).

#### Graph I Assessment of clinical features



#### DISCUSSION

It is genetically determined dermatological disorder which follows a relapsing and remitting course.

Although the exact prevalence and incidence of psoriasis in old people is difficult to estimate, it represents a significant percentage of cases.<sup>6,7</sup>

Because the disease is generally persistent and patients with psoriasis have a similar life expectancy to the general population, prevalence of psoriasis is expected to increase with age, comorbidities and treatments for other diseases have great influence on the evolution and therapy of psoriasis and it seems obvious that these inconveniences are commoner in aged people.8Psoriasis is known to be induced by various physical, chemical and inflammatory skin disruptions.<sup>9,10</sup> These include abrasions, incisions, rubbing, shaving, etc. Certain toxins, such as bacterial toxins that activate Tcells tend to induce the appearance of cutaneous lymphocyte antigen, which produces psoriatic lesions. The incidence of disease due to infection ranged from 15-76%. A study is evidenced showing a strong correlation between psoriasis infections with S. pyro genes.<sup>11</sup>The present study was conducted to compare management of cases of psoriasis.

We found that group I had 20 males and 20 females and group II had 16 males and 24 females. The mean PASI score was 13.8 and 15.5 at baseline, 13.0 and 12.2 at 1 month and 12.5 and 7.84 at 2 months in group I and group II respectively. Fernandez-Torres et al<sup>12</sup> conducted a study in which a total of 371 patients were included (218 males and 153 females) with ages ranging from 18 to 85 years, of whom 70 were older than 65 years. Patients older than 65 years have statistically significant higher prevalence of hypertension, left ventricular hypertrophy, waist-hip ratio, diabetes mellitus and raised blood glucose levels. There was also association between clinical severity of psoriasis and smoking and alcohol intake as well as between quality of life and type of psoriasis treatment

We observed that common clinical features were scalingseen in 15 in group I and 13 in group II, red lesion seen 11 in group I and 12 in group II, burning pain seen 7 in group I and 10 in group II, thick lesions seen 9 in group I and 5 in group II, itching seen in 26 in group I and 23 in group II and joint pain seen in 11 in group I and 13 in group II respectively. Karamata et al<sup>13</sup> conducted a study in which 114 patients were divided into three groups: Group A: topical therapy alone, Group B: methotrexate with topical therapy, and Group C: cyclosporine with topical therapy. The efficacy of drug was measured using Psoriasis Area Severity Index (PASI). QOL was measured using Psoriasis Disability Index. Patients were followed up at 1 month and 6 months of treatment. A total 126 patients were enrolled, out of which 114 patients completed the study. PASI score was reduced significantly (P < 0.001) in each treatment group and OOL score was significantly (P< 0.001) decrease in Group B and C as compared to baseline at the end of

6 months. A significant (P < 0.001) reduction in PASI score and QOL was observed in patients of Group B and C as compared to Group A. Correlation between efficacy and QOL was not significant in all three treatment groups.

# CONCLUSION

Authors found thatMethotrexate found to be superior than clobetasol propionate.Combination therapy is more effective in management of cases of psoriasis.

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