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Original Research

Assessment of cases of Psoriasis - A clinical Study

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ABSTRACT:

Background: Psoriasis is a rare chronic bullous disease of the skin and mucous membranes. The present study was conducted to assess cases of Psoriasis in both genders. **Materials & Methods:** 90 cases of psoriasis of both genders were included. Smoking history was obtained. Psoriasis Area and Severity Index (PASI) was recorded in all patients. Direct immunofluorescence (DIF) and indirect immunofluorescence (IIF) studies were repeated every six months. **Results:** Out of 90 patients, males were 52 and females were 38. The onset was mild in 15%, moderate in 60% and severe in 25%. The mean PASI score in smokers was 12.9, in non- smokers was 8.0, in alcoholics was 10.2 and in non- alcoholics was 5.8. The difference was significant (P< 0.05). **Conclusion:** PASI score was highest among smokers and alcoholics. Psoriasis was male predominance.

Key words: Psoriasis, PASI, Smoker

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INTRODUCTION

Psoriasis is a rare chronic bullous disease of the skin and mucous membranes. It is clinically characterized by blisters and erosions of the mucous membranes and skin. Psoriasis is an organ-specific autoimmune disease characterized by the production of autoantibodies directed against desmosomal proteins leading to acantholysis and thus the forming of epidermal bullae.[1] Importance of lifestyle factors such as smoking and alcohol use in its pathogenesis are being increasingly recognized.[2] Several studies have shown an association between smoking and psoriasis. Alcohol consumption also has been reported to increase the risk of developing psoriasis. However, there have been only a few published studies on the association of smoking and alcoholism with increased severity of psoriasis.[3]

It is a T-cell mediated autoimmune disorder leading to keratinocyte hyperproliferation.[5] Psoriasis has genetic predisposition that is further aggravated by certain stimulating factors. In spite of significant advances in understanding the pathogenesis of psoriasis, the exact etiology of the disease remains unknown. The clinical manifestations of this disease include various forms that affect different parts of the body. Treatment options vary according to the mode of application or severity of the disease.[4]

Currently, the disease remains associated with a mortality rate of about 6% despite the use of various adjuvant treatments. This mortality is essentially attributed to the side effects of used treatments, corticosteroids, and immunosuppressants. A therapeutic challenge of this last decade was the research of new treatments able to replace corticosteroids and presenting less important side effects.[5] The present study was conducted to assess cases of Psoriasis in both genders.

MATERIALS & METHODS

The present study was conducted among 90 cases of Psoriasis of both genders in the department of Dermatology. All patients were informed regarding the study and written consent was obtained.

Data such as name, age, gender etc. was recorded. Smoking history was obtained. Psoriasis Area and Severity Index (PASI) was recorded in all patients. Direct immunofluorescence (DIF) and indirect immunofluorescence (IIF) studies were repeated every six months. Epidemiological aspects, disease history, symptomatology, intercurrent diseases, treatment, and clinical evolution were reviewed. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Total- 90		
Gender	**Males**	**Females**
Number	52	38

Table I, graph I shows that out of 90 patients, males were 52 and females were 38.

Graph I Distribution of patients

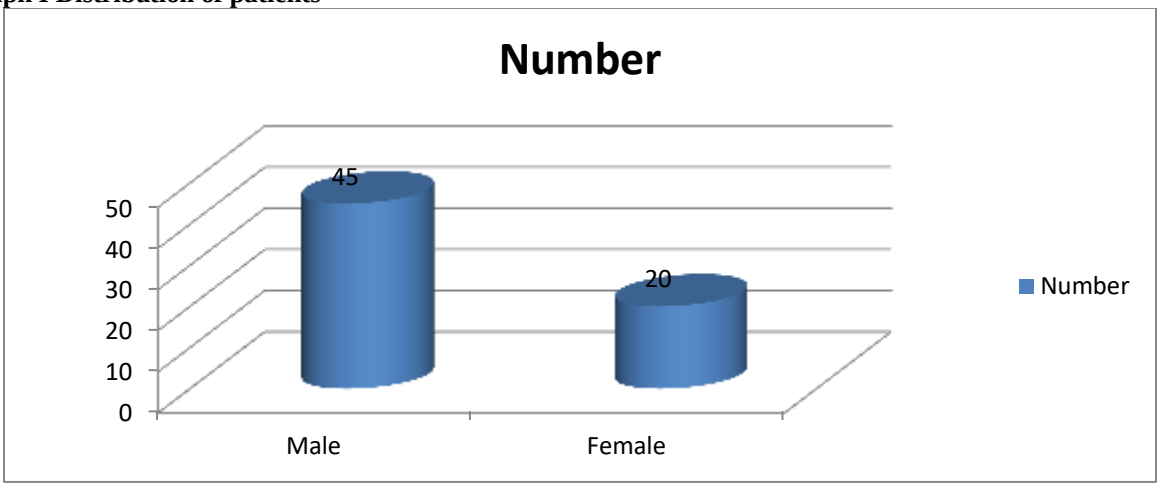

Table II Onset of disease

Onset	Number	P value
Mild	15%	0.01
Moderate	60%	
Severe	25%	

Table II shows that onset was mild in 15%, moderate in 60% and severe in 25%. The difference was significant (p< 0.05).

Table III PASI index in patients

Parameters	Mean	P value
Smokers (65)	12.9	0.03
Non smokers (25)	8.0	
Alcoholics (50)	10.2	0.05
Non- alcoholics (40)	5.8	

Table III shows that mean PASI score in smokers was 12.9, in non- smokers was 8.0, in alcoholics was 10.2 and in non- alcoholics was 5.8. The difference was significant (P< 0.05).

DISCUSSION

Psoriasis is the name of a group of autoimmune pathological entities characterized by the formation of intraepithelial blisters in the skin and/or mucosa. It is histologically characterized by the formation of intraepidermal blisters and by the presence of deposits of immunoglobulin G (IgG) on the surface of

keratinocytes. The presence of intraepidermal blisters results in loss of integrity of intercellular fixations caused by acantholysis, which means loss of adhesion between epithelial Malpighi cells.[6]

Psoriasis is best viewed as a multi-factorial disease where there is an interplay between genetic and environmental factors.[7] Psoriasis is also associated with chronic obstructive pulmonary disease, nonalcoholic fatty liver disease, and coronary artery disease. Persons with psoriasis may also have a significantly decreased quality of life and psychological burden including anxiety, depression, and suicidal thoughts and behavior.[8,9] The present study was conducted to evaluate cases of Psoriasis in both genders.

In this study, out of 90 patients, males were 52 and females were 38. Asokan et al[10] found that of a total of 338 patients, 148 were smokers and 173 used to consume alcohol. Mean PASI score of smokers was more than that of non-smokers. Those with severe psoriasis were more likely to be smokers. There was a significant correlation between PASI scores and Fagerström score. Mean PASI scores of persons who used to consume alcohol and those who did not were comparable. There was no association between severity of psoriasis and alcohol consumption. There was no correlation between PASI scores and AUDIT scores.

We observed that onset was mild in 15%, moderate in 60% and severe in 25%. The mean PASI score in smokers was 12.9, in non- smokers was 8.0, in alcoholics was 10.2 and in non- alcoholics was 5.8. Affandi et al[11] found that among 15,794 patients, Malays were the most common (50.4%), followed by Chinese (21.4%), Indian (17.6%), and others (10.6%). Te mean age onset of psoriasis for our study population was 35.14 ± 16.16 years. Male to female ratio was 1.3 : 1. 23.1% of patients had positive family history of psoriasis. Te most common clinical presentation was chronic plaque psoriasis (85.1%), followed by guttate psoriasis (2.9%), erythrodermic psoriasis (1.7%), and pustular psoriasis (1.0%). Majority of our patients (76.6%) had a mild disease with BSA < 10%. 57.1% of patients had nail involvement, while arthropathy was seen in 13.7% of patients. Common triggers of the disease include stress (48.3%), sunlight (24.9%), and infection (9.1%). Comorbidities observed include obesity (24.3%), hypertension (25.6%), hyperlipidemia (18%), diabetes mellitus (17.2%), ischaemic heart disease (5.4%), and cerebrovascular disease (1.6%). Te mean DLQI (Dermatology Life Quality Index) was 8.5 ± 6.6. One-third (33.1%) of the patients had a DLQI score of more than 10, while 14.2% of patients reported no efect at all. Morsya et al[12] assessed clinically, and then the Dermatology Life Quality Index (DLQI) was determined and SF-36 questionnaires were administered to patients. Of the 40 patients, there were 14 male and 26 female patients. Range of the DLQI for male patients was 8.0–22.0 and that for female patients was 3.0–27.0. The DLQI showed a significant correlation with surface area measured (P=0.048).

CONCLUSION

Authors found that PASI score was highest among smokers and alcoholics. Psoriasis was male predominance.

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