

CLINICAL PRESENTATIONS OF PSORIASIS IN A TERTIARY CARE HOSPITAL OF KHYBER PAKHTUNKHWA

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ABSTRACT

Objective: To find out different presentations of Psoriasis in a tertiary care hospital.

Material and Methods: This study is a cross sectional study conducted on a sample population of 184 patients including people across the province and Afghan refugees staying in the province. Data was collected on a set proforma. Age, gender and clinical presentations were recorded and analyzed using SPSS version 16.

Results: A total of 184 patients, 60.33% male and 39.69% female, were included in this cross-sectional study and were divided into three age groups. The highest frequency of disease was found in group 2 (21 to 45 years) that makes 45.7% of the study group. Chronic Plaque psoriasis was the most common type of psoriasis (68.5%) and was found higher in male population.

Conclusion: Plaque Psoriasis is the most common presentation and mostly found in male patients.

Key Words: Psoriasis, clinical presentation, Plaque psoriasis.

INTRODUCTION

Psoriasis is a T-cell mediated chronic inflammatory condition characterized by keratinocyte hyperproliferation, vascular endothelial proliferation, and inflammatory cell infiltration. The exact cause and pathogenesis of psoriasis are not well understood, but it is known to be multifactorial, having both genetic and environmental influences¹. Exogenous and endogenous factors, such as upper respiratory tract infection, emotional stress, skin injury, and drugs, can precipitate and exacerbate psoriasis². Streptococcal pharyngitis and perianal streptococcal dermatitis are common causes of Guttate psoriasis². Injury or irritation of normal skin can induce new psoriatic lesions at the site, known as the Koebner phenomenon. Antimalarials and the withdrawal of corticosteroids play a significant role in rebound psoriasis and the induction of childhood psoriasis, whereas β -blocking agents and lithium are recognized triggers for psoriasis in adult patients³.

Psoriasis is a common condition that affects 3.5% of the population³. It can present at any age from birth to advanced age. A bi-modal age of onset has been recognized in several larger studies with the mean age of first presentation from 15 to 20 years and a second

peak at 55 to 60 years^{4,5}. In more than 1/3rd of patients, initial presentation of Psoriasis occurs in the first two decades of life⁶. About 10% of patients develop Psoriasis before the age of ten. The different types of Psoriasis are Plaque Psoriasis, Guttate Psoriasis, Flexural (inverse psoriasis), Erythrodermic psoriasis, Pustular psoriasis, Palmoplantar pustulosis (Acrodermatitis continua of Hallopeau), Psoriatic arthritis. Diagnosis of psoriasis is based on clinical appearance of skin lesion but biopsy is necessary to distinguish psoriasis from other conditions with similar appearances such as lichen planus, lichen simplex chronicus, tinea corporis and seborrheic dermatitis. The aim of this study was to identify the percentage of occurrence in different age and gender and clinical presentation of psoriasis in our set up.

MATERIAL AND METHODS

This cross-sectional study was conducted at the Dermatology Unit, Khyber Teaching Hospital, Peshawar, from January 2009 to December 2011. All patients who were admitted with diagnosis of psoriasis were included in the study. A structured proforma was designed to record age, gender and clinical presentation of the psoriasis. SPSS version 16 was used to analyze the data.

RESULTS

A data of 184 patients was recorded in this study. The patients were divided into three age groups (Fig. 1) with the minimum age of 3 years and maximum 75 years (mean age of $40.51 \pm SD 18.7$

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years). Largest number of patients with psoriasis were in age group 2 (21 to 45 years) that makes 45.7% of the total patients followed by group 3 (34.2%). There were 73 (39.69%) female and 111 (60.33%) male patients. As shown in Table 1, chronic Plaque psoriasis was the most common presentation (68.5%) followed by Erythrodermic and Guttate psoriasis (7.1% and 6.0% respectively). The occurrence of chronic Plaque psoriasis was considerably higher in male population (71.2%) as compared to females (64.4%). Similar trend was seen in case of Erythrodermic psoriasis, however, Guttate and generalized Pustular psoriasis was found more common in females (Table 2). Guttate psoriasis was found in the young age (5-12 years). The Afghan patients comprised 9.24% of the total study group.

DISCUSSION

Psoriasis is a non contagious chronic relapsing skin disorder with severe psychological and social

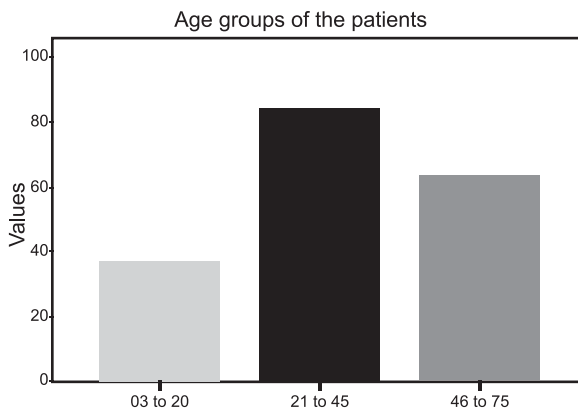


Fig. 1

Table 1: Clinical presentation of the patients

Presentation	No. of patients and %age
Ch.Plaque	126 (68.5)
Erythroderma	13 (7.1)
Guttate	11 (6.0)
Hallopeau	3 (1.6)
Inverse	2 (1.1)
Plaque. arthritis	8 (4.3)
Pustular	7 (3.8)
PPPs	9 (4.9)
PPPs.arthritis	3 (1.6)
Scalp	2 (1.1)
Total	184 (100.0)

PPPs: Palmoplantar psoriasis

Table 2: Gender-wise distribution of presentation

Presentation	F	M
Ch.plaque	47 (64.4%)	79 (71.2%)
Erythroderma	3 (4.1%)	10 (9.0%)
Guttate	7 (9.6%)	4 (3.6%)
Hallopeau	2 (2.7%)	1 (.9%)
Inverse	1 (1.4%)	1 (.9%)
Plaque.arthritis	2 (2.7%)	6 (5.4%)
Pustular	5 (6.8%)	2 (1.8%)
PPPs	6 (8.2%)	3 (2.7%)
PPPs.arthritis	0 (.0%)	3 (2.7%)
Scalp	0 (.0%)	2 (1.8%)
Total	73 (100.0%)	111 (100.0%)

PPPs: Palmoplantar psoriasis

impact. At times the disease may present atypically that the dermatologist should be familiar with to overcome diagnostic problems. A preliminary review of literature revealed that data on psoriasis from Pakistan was insufficient as compared to the rest of the world.

In the present study the mean age of presentation of psoriasis was 45.1 years which is a higher age group than what is mentioned in international literatures (15 to 20 years)⁶. However, in a study by Suite et al, the age of presentation was 50 to 70 years⁷. This observation may be due to the fact that accurate determination of age of onset of psoriasis is quite problematic as studies rely on patient's recall of the onset of disease or recording the onset from physician's diagnosis at initial visit. Data on patient's recall can be inaccurate and on patients first visit to physician may under estimate the time of appearance of the disease, as mild lesions may be present for a long time before consultation is sought by the patient¹.

Psoriasis is reported to affect both sexes equally³, however in this study a significantly higher number (60.33%) of male patients was recorded compared to females (39.6%). A possible explanation for this could be that as psoriasis has a major effect on quality of life^{8,9} which may drive the male patients to seek help more often¹⁰ as they are more exposed to the environmental triggers in our set up. Moreover, in some parts of the province, due to socio-economical constraints, females are hesitant to seek medical advice on time or at all.

In the present study Plaque psoriasis was found as a major presentation (68.5%) which is in accordance with other studies¹². Stefanaki et al¹¹ have the same findings in children. In our study, however the second major presentation was Erythrodermic psoriasis (7.1%)

which is not commonly mentioned in international literature. A plausible reason being that Erythrodermic psoriasis is a serious life threatening condition requiring urgent referral and admission in a tertiary care hospital also this study may not be reflective of true representation of population as the sample population was 184 admitted patients in a tertiary care hospital which creates a limitation of making the results as generalized. Guttate psoriasis, although not so frequently encountered in this study was seen mainly in young age (5 to 12 years) which is again similar to other studies¹². Palmoplantar psoriasis was the presenting complaint in 4.9% of patients which simulates and was possibly misdiagnosed previously as chronic hyperkeratotic eczema. All these patients were middle aged females (40 to 45 years). This correlates to studies carried out by Griffith et al³. Psoriatic arthritis was basically seen in association with Plaque psoriasis in the present study. This is also shown by Kane et al and Mease PJ et al where they found that 94% of cases of psoriatic arthritis had plaque psoriasis at the time of presentation^{13,14}.

CONCLUSION

Plaque psoriasis was the commonest type seen mostly among males. The clinical features of different types of psoriasis in our patients were similar to those reported from other parts of the world. Psycho-social impact of the psoriasis on different age and gender groups needs to be investigated.

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