Effect of Psoriasis on Quality of Life

Basnet B1, Ranjit A1, Subedi A2, Shrestha S3, Neupane S1

1Department of Dermatology and Venereology; 2Department of Psychiatry, Gandaki Medical College, Pokhara, Nepal; 3Department of Ophthalmology, Manipal Teaching Hospital, Pokhara, Nepal.

Abstract

Introduction: Psoriasis is one of the common skin disorders which has a significant distressing effects on patients due to its chronicity, joint involvement, therapy related side effects and its impact on physical appearance.

Objective: To find out impairment in quality of life among patients with psoriasis.

Materials and Methods: Patients attending the Dermatology outpatient department of Gandaki Medical College were recruited for the study from December 2016 to July 2017. Dermatology Life Quality Index (DLQI) was used to assess the psychosocial involvement.

Results: Significant increase in DLQI scores depicting graver psychosocial involvement in females compared to males was observed (p=0.038). Comparison between severity of disease and DLQI scores showed a positive correlation but was not statistically significant (r=0.22 & p=0.187). When we compared the type of psoriasis with severity of disease, chronic plaque psoriasis showed significant statistical correlation (p=0.003).

Conclusion: Females tend to experience significant impairment in quality of life compared to males. Further studies with more sample size are needed to consolidate or rectify our findings.

Key words: Chronic disease; counseling; psoriasis; psychological; quality of life; stress

Introduction

Psoriasis is a chronic inflammatory dermatosis that affects around 125 million people worldwide.1 Usually it does not affect survival but has significant harmful effects on quality of life (QOL).2 Psoriasis has a bimodal age distribution, which peaks in the 20s and 60s.3 It is often linked with social impairment, decreased self-confidence, pain, physical disability, and psychological distress.4 Psoriasis can be an upsetting disease both for the patient and the doctor, and its influence on QOL has been well proven leading to limitation in activities, with psychosocial factors being more impaired than physical activities.5-7 Many factors may be attributed to the decreased QOL in patients, especially the chronic relapsing nature of the disease, lack of control and fear of disease breakout, and hopelessness in terms of cure.8 Psoriasis has a strong socioeconomic impact on patients’ lives; thus, it is essential to find out patient’s goals and make a practical and realistic treatment plan. This includes both general measures and specific treatment, including counseling, rest, and advice on moisturizing the skin round-the-clock, which may be significant in improving the QOL of the patients.

Materials and Methods

Patients more than 18 years attending the outpatients department of Dermatology of Gandaki Medical College were selected from December 2016 to July 2017. Prior permission was taken from the institutional review board. Informed consent was taken from all patients enrolled in the study. Proforma of all the patients were filled out. For all the patients, Dermatology Quality Life Index (DLQI) was used to

Address of Correspondence:
Dr. Binamra Basnet
Assistant Professor
Department of Dermatology
Gandaki Medical College, Pokhara, Nepal
E-mail: binamrabasnet@gmail.com

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access the psychosocial involvement. We divided the patients into mild (<3% BSA), moderate (3-10% BSA) and severe (>10 %BSA) based only on the area of skin involvement. In this study Body Surface Area (BSA) index was used for assessing the severity of psoriasis. Contrary to Psoriasis Area and Severity Index (PASI), BSA does not include erythema, infiltration, and desquamation. We focused on the severity of disease according to the BSA and did not include detailed clinical findings of psoriasis.

Moreover, in prior research, clinically assessed disease severity and specific psoriasis characteristics were consistently found to be the least useful parameter regarding differences in stress, depression and psychological distress.9-12

Results

All analysis were done using statistical package for social sciences (SPSS). Univariate or Bivariate analysis was done using t-tests wherever appropriate, p value less than 0.05 was considered statistically significant. The total number of participants were 36 (23 males and 13 females). Mean age of the patients was 31.64±10.22 yrs, youngest patient being 19 years and the eldest was of 52 years. Out of 36 patients only 4 had severe disease, 12 had mild disease and remaining 20 had moderate disease. Two patients had very large psychosocial involvement (DLQI Score 11-20), 20 patients had small effect, four had moderate effect and 10 patients had no psychosocial involvement at all. Relevant data are given in Table 1.

Bivariate correlation between DLQI scores and body surface area (BSA) showed a positive correlation but was not statistically significant (r=0.22 & p=0.187). Independent sample t-Test showed significant increase in DLQI scores in females compared to males (p value 0.038) (Table 2).

There was no significant correlation between the type of Psoriasis and DLQI scores but when we compared the type of psoriasis with severity of disease, chronic plaque psoriasis had a higher mean BSA of 5.26% compared to 2.56% in other types resulting in significant statistical correlation (p=0.003).

Discussion

The most important aspect in the management of psoriasis is counseling. The clinician has to be considerate, he should have ample patience and counsel the patient regarding nature of the disease; its non-contagious nature; its remitting and relapsing course; the factors which lead to its relapse such as stress, both physical and mental, drugs, and alcohol; and how to cope with the disease and carry out routine activities.13 Patients should be very well informed about the therapeutic options available and the potential side effects. Control of the disease should be the primary objective rather than cure of the disease.14 Emotional stress may play an important role in the development and exacerbation of psoriasis in 37–78% of patients.15 Since many skin disorders are commonly associated with social stigmatization, patients can suffer from frustration, anxiety, or depression. Most of the patients with psoriasis suffer from depression, anxiety and social isolation.16-17 Dalgard FJ et al found that patients with psoriasis were more prone to have psychological effects than those with other skin conditions.18

Wojtyna E et al found the impact of physical appearance in personal life and its blemishes having significant association with risk for depression.19 Awareness of the patient, and the reactions of others, may play an important role in psychosocial stability. In comparison to other skin conditions psoriasis has more negative psychosocial impact on the patients. Misconception of infectious and contagious nature of psoriasis is very

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<th>Table 1: Participants’ characteristics.</th>
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<td>Age (years), Mean±SD</td>
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<td>Sex, n (%)</td>
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<tr>
<td>Male</td>
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<tr>
<td>Female</td>
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<tr>
<td>BSA mean±SD (range)</td>
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<td>BSA involved, n (%)</td>
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<td>&lt;5%</td>
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<td>5-10%</td>
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<td>&gt;10%</td>
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<td>DLQI mean (range)</td>
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<th>Table 2: DLQI scores in males and females.</th>
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<td>Sex n Mean SD Std. Error t-test value P-value</td>
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<td>DLQI</td>
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<td>F 13 5.23 3.166 0.878</td>
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DLQI- Dermatology Life Quality Index, SD-Standard deviation
common.20 Kurd SK et al showed that the adjusted hazard ratio (HR) of depression was higher in severe (1.72; 95% CI, 1.57–1.88) compared with mild psoriasis (1.38; 95% CI, 1.35–1.40). The adjusted hazard ratio of suicidal thoughts was higher in patients with severe psoriasis (1.51, 95% CI, 0.92, 2.49) compared to mild psoriasis.21

Elevated inflammatory cytokines have been found in postmortem patients who have attempted or completed suicide, indicating a possible role of inflammation in mood disorders.22-23 Mutations in genes associated with psoriasis which increase pro-inflammatory cytokines can lead to HPA axis overactivity and disturbance of negative feedback inhibition of circulating corticosteroids. This in turn can lead to lower serotonergic levels and depressive symptoms.24 Elevated levels of prostaglandin E2, C-reactive protein (CRP), TNF-α, IL-1b, IL-2 and IL-6 have been associated with depression.25-26

Mood disorders, particularly depression, have been suggested to be more in patients with psoriasis than in the general population (up to 62% prevalence). In a meta-analysis of 98 cross-sectional studies examining the association between psoriasis and depression, patients with psoriasis had more depressive symptoms (pooled standardized mean difference, 1.16 [95% CI, 0.67-1.66]) and were nearly 1.6-fold more likely to experience depression (pooled OR, 1.57 [95% CI, 1.40-1.76]) than patients without psoriasis.27

The risk of depression in psoriasis has been evaluated in two cohort studies. In a study from UK, psoriasis was found to be associated with increased risk of depression (HR, 1.39 [95%CI, 1.37-1.41]), anxiety (HR, 1.31 [95% CI, 1.29-1.34]), and suicidality (HR, 1.44 [95% CI, 1.32-1.57]).28 Among patients who were receiving therapies for severe psoriasis the risk of depression was the most (HR, 1.72 [95% CI, 1.57-1.88]). Similarly, a study of women in the Nurses’ Health Study found psoriasis to be associated with a nearly 30% increased risk of depression (RR, 1.29 [95% CI, 1.10-1.52]), independent of age.29

Conclusion

Our study showed that females had significant impairment of quality of life compared to males. Chronic plaque psoriasis was positively associated with severity of disease than other types of psoriasis. Further studies with more sample size are needed to consolidate or rectify our findings.

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Conflicts of interest to disclosure: None declared.

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