RESEARCH ARTICLE

Quality of life evaluation in women Psoriatic patients

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ABSTRACT

Background: Psoriasis is a common chronic, recurrent, immune mediated disease of the skin and joints, found worldwide but the prevalence varies among different ethnic groups. It is associated with significant physical and psychological burden thus has a significant negative impact on the wellbeing of affected patients demonstrable by significant detriment to quality of life. It affects all aspects of a patient's life -relationships, social activities and emotional wellbeing. The present study was conducted to evaluate the clinical severity, the physical, mental and social disability and their interrelationship in female psoriatic patients. Materials and Methods: This study includes a total of 49 consenting female psoriatic Patients age ranged from 18-70 years, visiting OPD of various hospitals in North India. Clinical severity, physical and psychosocial stress were measured using Psoriasis area severity index (PASI) and Psoriasis disability index (PDI). Result: The clinical PASI scores correlated significantly with the PDI. Conclusion: Our findings highlight the importance of assessing the quality of life in psoriasis by employing holistic approaches that can keep patient's overall wellbeing at par with clinical severity.

Key words: Psoriasis, Psoriasis area severity index, Psoriasis disability index, Patients, Quality of life.

INTRODUCTION

Psoriasis is a chronic inflammatory skin disease which has a devastating effect on the physical, psychological and skin functioning (Rakhesh et al., 2008). It has a close association with significant psychological morbidity and a decrease in health related quality of life (Choi and Koo, 2003). It is a serious disease with a profound impact on overall patient well-being (de Arruda and De Moraes, 2001). Mere assessment of the disease by the professionals on the basis of its clinical severity is not sufficient, as the burden of this disease extends beyond physical manifestations and involves significant physical, social and psychological impairment (Kirby et al., 2001). Thus, more holistic approaches to the quality of life of psoriatic

patients is need of the hour. For psoriasis, many quality of life tools have been developed and tested in clinical trials to assess treatment response, out of which Psoriasis Disability Index (PDI) is one of the most popular and frequently used. Quality of life (QoL) data determines 'treatment success' as it measures many impalpable changes in patient's life (Langley et al., 2005). Although psoriasis does not discriminate by gender. No difference on the basis of gender has been encountered in the severity of physical symptoms. However, women and men have different subjective perceptions with regard to symptoms that affect their socialisation, emotional states and all this ultimately affects their QoL (Colombo D, Perego, 2013). India's contribution to the number of studies that have taken into account the quality of life related issues of this detrimental disease is less. Thus the present study is an endeavor to evaluate the clinical severity, the physical, mental and social disability in female psoriatic patients.

MATERIAL AND METHODS

This study includes a total of 49 consenting female psoriatic patients age ranged from 18-70 years, visiting OPD of various hospitals in North India. The subjects were either freshly diagnosed (prior to treatment) or those who undergone off treatment for topical (for two weeks) and systemic and phototherapy (for four weeks). Any patient on treatment (allopathic, ayurvedic, homeopathic) for psoriasis, male psoriatic patients and those with any other coexistent autoimmune disorders, acute or chronic infections, and malignancies was excluded from the study.

Assessment of Psoriasis Severity

To assess the severity of disease, surface area under disease was calculated using PASI calculator developed by Fredrikkson and Petterson in 1978 (Van de Kerkhof, 1997). The severity of psoriasis was graded according to the PASI score as 'mild', 'moderate' and 'severe'. PASI Score <7 as mild type psoriasis, 7–12 as moderate type psoriasis and >12 as severe type psoriasis (Schmitt and Wozel, 2008). The total body surface area is divided into four sections viz. Head(H)(10%), Arm(A)(20%), Trunk (T)(30%) and Legs(L)(40%), the percentage of area of skin involved is estimated by using the patients palm and transformed into a grade from 0-6(as prescribed in the PASI calculator).

Assessment of Quality of Life

Quality of life of psoriatic patient was assessed by using Psoriasis Disability Index (PDI) developed by Finlay and Coles, 1995) (1999 revised).

Statistical Analysis

Statistical analysis was done using vassar stats an online tool. Continuous variables were presented as mean \pm standard deviation.

RESULTS

Clinical and demographic characteristics of patients

Present study includes a total of 49 female psoriatic patients age ranged from 18-70 years with mean and SD of 38.55± 14.16, mean PASI value of psoriatic patients was 09.63± 8.13 (SD). Psoriasis Disability Index (PDI) of patients with mean and SD was 19.22± 7.16 (Table 1). The mean age of onset in female psoriatic patients was 38.5 years. Table 2 shows the age of onset of psoriasis in females of different age groups. Maximum number of patients fall in the age group 41-50 years while as age group 61-70 had the least number of patients.

Table 1: Shows Various Clinical and demographic
characteristics of subjects

PARAMETER	CASES (N=49)
Age : X ± SD	38.55± 14.16
Range(Years)	18-70
PDI : X ± SD	19.22± 7.16
PASI : X ± SD	9.63± 8.13

Гable 2 : The age at psoriasis onset in female
psoriatic patients

	Female Psoriatic
AGE	Patients
11-20	6
21-30	11
31-40	8
41-50	12
51-60	9
61-70	3





Fig. 1: The age at psoriasis onset in female psoriatic patients

Correlations between PASI Score and PDI

A strong association was observed in female psoriatic patients when we correlated the surface area of psoriatic lesions with quality of life in north India (p <0.0001) as shown in table 3.

DISCUSSION

Psoriasis is associated with significant psychological distress, psychiatric morbidity, experience Stigma and decreased QoL (Ginsburg and Link, 1989; Gupta and Gupta, 1995). The clinical severity of the disease as manifested by PASI is found significantly correlated with the overall physical disability (PDI). Studies by Finlay et al. (1990); Aschroft et al. (1998) and Gelfand et al. (2004) have found moderate correlation between PASI scores and PDI scores, which shows concordance with our findings. Some studies, however, did not find any significant correlation between PASI and PDI scores (Yang et al., 2005; Fortune et al., 1997). It has been demonstrated earlier that PDI proves to be a reliable tool for severe psoriatic patients, who are more disable physically and related life style limitations.¹⁷ Our patients had extensive clinical involvement making them physically disable and

imposing limitations on their life styles which explains the significant correlation between PASI and PDI in this study. However as per Fortune's et al. (1997) study patients with milder disease showed contrasting results as in their case it did not interfere with their life styles. Analysis of psychometric properties of PDI have led to the conclusion that PDI is not well targeted to measure disease impact among patients with lower levels of disability (Nijsten, 2005). Studies have shown that for men it is easier to tackle the social effects of psoriasis, in contrast, to women who are more likely to feel distressed or embarrassed in social gatherings (Perrott et al., 2000). An another way of understanding differences between men and women's reactions to psoriasis has been provided by stress research. Women may be easy victims to perceive stress and hence more likely to have a greater impact on psychological QoL (Misery et al., 2008). Other studies have shown that women may have a higher odds of being stress-reactors (Zachariae et al. 2004). Boehm et al. (2013) have found that women reported higher discomfort levels and higher stigmatization, and that, in general, gender differences are observable in the mental component summary score, but not in generalphysical or skin-related QoL. It can be said that the present study is in concordance with others studies

that provide evidence that psoriasis affects the quality of life, and it highlights the importance of adopting more specific tools for assessment of psoriasis.

CONCLUSION

Our findings highlight the importance of assessing the quality of life in women psoriatic patients' multi dimensionally. On the basis of this study, it can be recommended that more holistic approaches are needed which take into consideration patient's overall well-being, not only clinical severity. More tools need to be designed that would be more robust to assess disease specific quality of life.

Conflicts of interest: The authors stated that no conflicts of interest.

REFERENCES

- Rakhesh SV, D'Souza M, Sahai A (2008) Quality of life in psoriasis: A study from south India. *Indian J Dermatol Venereol Leprol*,74: 600-6.
- Choi J and Koo JYM (2003) Quality of life issues in psoriasis. J Am Acad Dermatol.,;49: 57-61.
- de Arruda LH, De Moraes AP (2001) The impact of psoriasis on quality of life. *Br J Dermatol*, 144:33-6.
- Kirby B, Richards HL, Woo P, Hindle E, Main CJ, Griffiths CE (2001) Physical and psychological measures are necessary to assess overall psoriasis severity. J Am Acad Dermatol; 45:72-6.
- Langley RGB, Krueger GG, Griffiths CEM (2005) Psoriasis: epidemiology, clinical features, and quality of life. *Ann Rheum Dis*; 64(Suppl II):ii18–ii23.
- Colombo D, Perego R (2013) Quality of Life in Psoriasis, In: Lima H,editor. Psoriasis - Types, Causes and Medication. InTech; 141-158.
- Van de Kerkhof PC (1997) The Psoriasis Area and Severity Index and alternative approaches for the assessment of severity; persisting areas of confusion. *Br J Dermatol.*; 137(4): 661-662.
- Schmitt J, Wozel G (2005) The psoriasis area and severity index is the adequate criterion to define severity in chronic plaque-type psoriasis. *Dermatology*, 210(3): 194-199.
- Finlay AY, Coles EC (1995) The effect of severe psoriasis on the quality of life of 369 patients. *Br J Dermatol*;132(2): 236-244.
- Ginsburg IH, Link BG (1989) Feelings of stigmatization in patients with psoriasis. *J Am Acad Dermatol*;20: 53-63.
- Gupta MA, Gupta AK (1995) Age and gender differences in the impact of psoriasis on quality of life. Int J Dermatol; 34: 700-703.

- Finlay AY, Khan GK, Luscombe DK, Salek MS (1990) Validation of sickness impact profile and psoriasis disability index in psoriasis. *Br J Dermatol*;123:751-756.
- Ashcroft DM, Li Wan Po A, Williams HC, Griffiths CE (1998) Quality of life measures in psoriasis: A critical appraisal of their quality. *J Clin Pharm Ther*;23:391-8.
- Gelfand JM, Feldman SR, Stern RS, Thomas J, Rolstad T, Margolis DJ (2004) Determinants of quality of life in patients with psoriasis: A study from the US population. *J Am Acad Dermatol*; 51:704-8.
- Yang Y, Koh D, Khoo L, Nyunt, SZ, Nq V, Goh CL (2005) The psoriasis disability index in Chinese patients: Contribution of clinical and psychological variables. *Int J Dermatol*;44:925-9.
- Fortune DG, Main CJ, O.Sullivan TM, Griffiths CE (1997) Quality of life in patients with psoriasis: The contribution of clinical variables and psoriasis specific stress. *Br J Dermatol*; 137:755-60.
- Koo J (1996) Population-based epidemiologic study of psoriasis with emphasis on quality of life assessment. *Dermatol Clin*;14:485-96.
- Nijsten T, Whalley D, Gelfand J, Margolis D, McKenna SP, Stern RS (2005) The psychometric properties of the Psoriasis Disability Index in United States patients. J Invest Dermatol; 125:665-72.
- Perrott SB, Murray AH, Lowe J, Ruggiero KM (2000) The personal-group discrimination discrepancy in persons living with psoriasis. *Basic Appl Social Psychol*;22: 57–67.
- Misery L, Thomas L, Jullien D, Cambazard F, Humbert P, Dubertret L, Dehen L, Macy G, Boussetta S, Taieb C (2008)Comparative study of stress and quality of life in outpatients consulting for different dermatoses in 5 academic departments of dermatology. *Eur J Dermatol*; 18: 412–415.
- Zachariae R, Zachariae H, Blomqvist K, Davidsson S, Molin L, Mørk C, Sigurgeirsson B (2004)Self-reported stress reactivity and psoriasis- related stress of Nordic psoriasis sufferers. *J Eur Acad Dermatol Venereol*;18: 27–36.
- Bohm D, Stock Gissendanner S, Bangemann K, Snitjer I, Werfel T, Weyergraf A, Schulz W, Jager B, Schmid-Ott G (2013) Perceived relationships between severity of psoriasis symptoms, gender, stigmatization and quality of life. *J Eur Acad Dermatol Venereol*;27: 220–226.

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