Original Research Article

Psoriasis &psychiatric morbidity: a profile from a tertiary hospital in south india.

Bikkireddy Thanuja[1], Krishna Rajesh Kilaru[2*], Pooja Munnangi[3], T.V.Pavan Kumar[4], Susmitha Reddy Maddireddy[5], B. Divya[6]

[1]Assistant Professor, Department of Dermatology, Venereology and Leprosy, NRI Medical College and General Hospital, Chinakakani, Guntur, Andhra Pradesh, India
[2]Associate Professor, Department of Dermatology, Venereology and Leprosy, NRI Medical College and General Hospital, Chinakakani, Guntur, Andhra Pradesh, India
[3]Assistant Professor, Department of Dermatology, Venereology and Leprosy, NRI Medical College and General Hospital, Chinakakani, Guntur, Andhra Pradesh, India
[4]Professor, Department of Psychiatry, NRI Medical College and General Hospital, Chinakakani, Guntur, Andhra Pradesh, India
[5]Postgraduate, Department of Dermatology, Venereology and Leprosy, NRI Medical College and General Hospital, Chinakakani, Guntur, Andhra Pradesh, India
[6]Senior Resident, Department of Psychiatry, NRI Medical College and General Hospital, Chinakakani, Guntur, Andhra Pradesh, India

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Abstract

Background: Psoriasis has an impact on psychology of the patients. There is a dearth of studies regarding this field in south India. **Aims and Objectives:** The primary objective is to assess the psychosocial distress of patients with psoriasis and to examine the subjective influence of stress on psoriasis. **Settings and Design**: Institutional based case control study. **Materials and Methods**: A total of 50 consecutiveconsenting psoriasis patients fulfilling the inclusion and exclusion criteriaattending Dermatology OPD in a tertiary care hospitalwere included in our study. Demographics, type and duration of psoriasis was recorded by a dermatologist. Patient was then assessed by a psychiatrist and scored for anxiety and depression using Hamilton anxiety rating (HAM-A) &Hamilton depression rating (HAM-D). Stress was assessed by the stressful life events scale. Data was statisticallyanalysed. **Results:** Out of the sample of 50 taken for our study, the majority(>50%) of patients are in the 30- 50 years age group. Out of these 66% (n=33) were males and 37% (n=17) were females. Duration of psoriasis in most of the patients (18) of our study was between 1 to 30 months. Most common type of psoriasis in our group was psoriasis vulgaris in 76% (n=38). In our study HAM-A and HAM-D showed no anxiety and depression in 86% and 78% of patients respectively. Stressful life events scale showed that 84% of patients had stress preceding the onset of psoriasis. **Conclusion:** Majority of Psoriatic patients in the study experienced multiple stressful life events preceding the onset of Psoriasis. Less percent of patients had depression, anxiety or both. Multidisciplinary approach involving Dermatologists and Psychiatrists can help manage this disease better.

Keywords: Psoriasis, Psychiatric Morbidity, HAM-A, HAM-D, Stressful Life Events.

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Introduction

Psoriasis is a chronic, non-contagious skin disease, affects 1% to 3% of the world population. It affects men and women in equal proportions and is more common among Caucasians.In India, its prevalence is 0.44-2.8 percent.Despite having a still unknown cause, psychosocial factors are often related to its onset or worsening, excessively influencing the quality of life of affected people[1-3].Stress is one of the possible factors associated with the establishment and development of this pathology. It is considered a very strong link between mind and body and no disorder or other conditions produce such interaction.[4]It also directly influences cells' inflammatory and proliferative process in psoriasis. Instruments assessing stress are scarce, although this phenomenon is fully interconnected to a better or worse quality of life and is considered an important aspect in the health-disease process.The clinical expression of the disease may make the individual more vulnerable to stress and provide loss in quality of life, since more than half of affected individuals suffer from peeling and constant itching[4-6].Due to the distress caused by lesions, reports of anger, depression, shame and anxiety feelings are common[7].

Aim

To assess the psychosocial distress in patients with psoriasis

Materials & Methods

It is an Institutional based case control study.

Source

All the patients attending the department of DVL in a tertiary care teaching hospital and in whom a diagnosis of Psoriasis is made, form the subjects for the study**.**

Sample size / Duration

**Correspondence*
Dr. Krishna Rajesh Kilaru
Associate Professor, Department of Dermatology, Venereology and Leprosy, NRI Medical College and General Hospital, Chinakakani, Guntur, Andhra Pradesh, India.
E-mail: krishnarkilaru@gmail.com

Sample size is 50 consecutive patients with Psoriasis attending outpatientclinicsof the Department of DVL. Duration of study was 6 months.

Inclusion criteria

1. Age 18 years and above.
2. Patients with Psoriasis.
3. Psoriasis patients willing to participate in the study.

Exclusion criteria

1. Age<18 years.
2. Patients should not have any other comorbid general medical illness.
3. Females who are pregnant or breast-feeding.
4. Patients unwilling to participate in the study.

The Procedures To Be Followed In The Study

A predesigned Proforma will be used for all cases which includes detailed history and clinical examination findings, necessary laboratory investigations. Punch biopsy of skin will be done, wherever necessary. Psychiatric evaluation will be done by a psychiatrist. Data collected will be subjected to statistical analysis.

Statistical Analysis

1. Qualitative data like sex, psychiatric disease, type of psoriasis and quantitative data like age, height, weight, duration of disease.
2. Data will be expressed as percentage.

Statistical Analysis

Data were analysed using statistical packages for SPSS (Version 21). Descriptive statistics, Chi Square test, correlation were done.

Results

The age of psoriasis patients ranged from 18-68 years with the youngest patient being 18 years and the eldest patient being 68 years and a mean age of 41.74 years.

Table 1: Age distribution

Age in years	No of patients	%
10-20	5	10.0
21-30	8	16.0
31-40	16	32.0
41-50	10	20.0
51-60	7	14.0
61-70	4	8.0
Total	50	100.0

Table 2: Sex ratio

Gender	No of patients	%
Male	33	66
Female	17	34
Total	50	100

In the study group, 33 were males and 17 were females with a male to female ratio of 1.94 : 1.

Table 3: Cutaneous examination

Site of Rash	Positive	%
Scalp	21	42
Trunk	28	56
Upper Limbs	30	60
Lower Limbs	29	58
Palms	13	26
Sole	11	22
Flexures	7	14

Table 4: Distribution of duration of problems diseases among the study patients

Months	No of patients
1-30	18
31-60	12
61-90	8
91-120	8
121-150	3
151-180	1

In the present study, majority of the patients (18) had psoriasis for 1 to 30 months. The mean duration of illness was 55.9±51.3 months in psoriasis.

Table 5:Types of Psoriasis

Type	No of Patients	%
Scalp psoriasis	5	10
Palmo plantar psoriasis	6	12
PsoriasisVulgaris	38	76
Flexural psoriasis	1	2
Total	50	100

Most of the patients in the study were suffering from psoriasis Vulgaris (76%) followed by palmo plantar psoriasis (12%), scalp psoriasis (10%) and fexural psoriasis (2%).

Hamilton rating scale for anxiety (HAM-A)

The HMA-A probes 14 items and takes 15-20 minutes to complete the interview and score the results. Each item is defined by a series of symptoms and measures psychic anxiety and somatic anxiety. Each item is rated on a scale of 0-4. The score of HAM-A will be normal for a score of 0-13, Mild anxiety :14-17, Moderate anxiety :18-24, severe anxiety if equal or more than 25. In the present study 86% (43) patients had no anxiety. Mild anxiety was observed in 14% (7) patients.

Hamilton rating scale for depression (HAM-D)

The HAM –D forms list 21 items. First 11 items are scored on a 5 point scale, ranging from 0 to 4. Remaining 10 items are scored from 0-2. Total score ranges from 0-62 ; scores of 0-7 are considered normal ; 8-13 mild ; 14-18 moderate; 19-22 severe and more than 22 very severe depression. It generally takes 15-20 minutes to complete the interview and score the results. This is the most commonly used measure of depression. 39 patients (78%) showed normal scale according to the HAM-D scale. Only 8 patients (16%) had mild depression and 3 patients (6%) showed moderate depression.

Table 6: HAM-A

HAM-A	No of patients	%
Normal (0-13)	43	86%
Mild anxiety (14-17)	7	14%
Moderate anxiety (18-24)	-	
Severe anxiety >25	-	

In the present study we found 86% of patients showed no anxiety and remaining 14 % had mild anxiety.

Table 7: HAM-D

HAM-D	No of patients	%
Normal (0-7)	39	78%
Mild depression (8-13)	8	16%
Moderate depression (14-18)	3	6%
Severe depression (19-22)	-	-
Very severe depression >23	-	-

In the present study we found 78% had no depression while 16% showed mild depression and 6% showed moderate depression.

Stressful Life Events

Stressful life index events were obtained by interview for recent life events by a semi structured interview covering 51 specific and clearly defined life events listed according to the level of their unpredictability and unpleasantness. In this study of 50 patients 84% (42) patients had stressful life index events and 16% (8) patients had no events from onset of diseases or just before (3 months) exacerbation of psoriasis. Most common events seen were major personal illness / injuries in 40% (20) followed by change in sleeping habits in 18% (9), financial loss/problems in 16% (8), change in eating habits 12% (6), illness among members 12% (6), Death of close family members 10% (5), marital conflict 10%(5), failure in examination 10% (5), change in social activities 10% (5), excessive alcohol/drug use by family members 6%(3), gain of new family members 6% (3), going to pleasure trip/pilgrimage 6% (3), appearing for examination or interview 6% (3), major purchase/construction of house 6% (3), change in work condition/transfer 6% (3), lack of son 6% (3), marital separation/divorce 6% (3), large loan 6%(3), unfulfilled commitments 4% (2), property crop damage 4% (2), break up with friend 4% (2), trouble with neighbour 4% (2),change/ expansion of business 4% (2), sexual problems 4% (2), getting married/engaged 4% (2), unfulfilled commitments 4% (2), trouble at work with colleagues , subordinates, superiors 2% (1), son/daughter leaving house 2% (1), extra marital/relation of self 2% (1), self/family members unemployed 2% (1), problems of astrologer/ love affairs 2% (1).In our study maximum stressful life events occured within three months preceding onset or exacerbation of the disease.

Discussion

Stressful life events are associated with higher levels of substance-p in central and peripheral nervous systems of animal models [8]. Neurogenic inflammation hypothesis of psoriasis put forth by Vera Leibovici et al[8] states that neuropeptides like substance-p and nerve growth factor(NGF) act as crux in its pathogenesis. Increase in expression of NGF in keratinocytes regulates skin innervations and upregulates NP'S. This has been found to be an early event in pathogenesis of psoriasis. NGF causes proliferation of T lymphocytes and brings mast cell degranulation resulting in production of chemokine (RANTES) which is chemotactic for resting CD4 Memory T cells(1) TS Satyanarayanarao et al[9].

Age

The age of psoriasis patients ranged from 18-68 years with the youngest patient being 18 years and the eldest patient being 68 years with a mean age of 41.74 years. In a study on Psoriasis RGB Langley et al the mean age of onset for the first presentation of psoriasis wasbetween 15 to 20 years of age and a second peak occurring at 55–60 years[10].

Sex

In our study there were 33(66%) males and 17(34%) female patients. A similar study by David hagg et al[11]also had more male patients. The less number of female patients in the study group can be explained by the socio cultural background in our country where females are generally less health care seekers compared to men.

Type of psoriasis: in our study most common type of psoriasis is Psoriasis Vulgaris seen in 76%(38) patients similar to a study by Adriana Rindan et al[12]

Psoriasis and Anxiety

Our study showed no link between psoriasis and anxiety 86% showed normal anxiety and 14% have mild anxiety which was similar to the findings in a study by Vera Leibovici et al[8], however a study by Richard et al found a relation between psoriasis and anxiety (43%) among their patients at tertiary hospital. Consoli et al, Karanikas et al and Taneri et al also found mild anxiety with relation to psoriasis in their study[13-16].

Psoriasis and Depression

In our study we found no relation between psoriasis and depression where 78% showed normal depression and 16% have mild depression, and 6 % have moderate depression, while a study by Gupta et al showed greater percentage of psoriatic patients suffering from depression[17].

Presumptive Stressful Life Events

In our study of 50 patients, 84% (42) patients had stressful life events and 16% (8) of patients had no such events from the onset of psoriasis. These findings were similar to a study by Malhotra S K et al[18] 42 patients had a total of 126 stressful life events with majority (32) of these patients having more than one stressful life event. Most common stressful event seen in our study was major personal illness which was similar to the findings in a study by Seville et al[19].

Conclusion

Majority of psoriatic patients in the study experienced multiple stressful life events preceding the onset of illness. Less percent of patients had depression, anxiety or both. Multidisciplinary approach involving Dermatologists and Psychiatrists can help manage the disease better.

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