Patients with severe psoriasis have high levels of psychological perceived stress: a pilot study on 300 Spanish individuals with psoriasis

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Introduction

Psoriasis is a chronic skin disease associated with considerable physical and psychological disturbances. Stress has been implicated in triggering both the onset and exacerbation of psoriasis. The objectives of this study were to determine the level of perceived stress in patients with psoriasis and to assess the association with severity of psoriasis.

Objectives

The aims of the present study include the assessment of causal beliefs in a psoriasis population and to examine the link between these attributions and mood, quality of life and health status in psoriasis. The second aim of this study is to measure perceived stress and examine the relationship with psychological well-being and psoriasis severity.

Methods

This is a cross-sectional and observational study evaluating a total of 300 psoriatic adult patients recruited, who were required to complete validated questionnaires assessing perceived stress of known origin or associated with disorders of the psychological mood. This study was conducted over a period of 18 months at the Department of Dermatology in the Hospital del Mar, Barcelona, Spain. Exclusion criteria included the previous diagnosis of severe psychiatric disorders (i.e. schizophrenia or bipolar states) and the presence of difficulties in understanding or expression rules. The socio-demographic and clinical variables collected in this study included: gender, age, psoriasis subtype, duration of the disease, the presence of psoriatic arthritis and pain and itching symptoms among others (see Table 1). Co-morbidities including smoking, alcohol intake, associating cardiovascular diseases or psycho-emotional disorders were particularly recorded (Table 2).

Patients completed validated questionnaires assessing stress and psychological mood (Holmes Life Event Scale (LES), Hospital Anxiety and Depression Scale (HAD), Spielberger State-Trait Anxiety Inventory (STAI), Hamilton Rating Scale for Anxiety (HRAS) and Montgomery-Asberg Depression Rating Scale (MADRS)). Evaluation for perception of disease as a consequence of perceived stress was also measured (SF-12 test). All these variables were evaluated to be associated with alterations in the quality of life (Health Assessment Questionnaire-Disability Index, Dermatology Life Quality Index (DLQI)), measurements of the severity of psoriasis (BSA, PASI).

Table 2: Co-morbidities according severity of psoriasis

PASI/BSA/DLQI	Mild to moderate <10	Moderate to severe ≥10	p
Smokers	31	65	0.004
Ethanol intake	73	94	0.524 (ns)
Any active cardiovascular risk factor	33	43	0.619 (ns)
Psychosocial co-morbidities	48	54	0.126 (ns)
Psychiatric disorder	32	53	0.458 (ns)
Current psychiatric treatment	7	27	0.019

Table 1: Socio-demographic and clinical data according severity of psoriasis

PASI/BSA/DLQI		<10	≥10	p
Gender	male / female; n(%)	54/69 (123)	88/89 (177)	0.321 (ns)
Psoriasis subtype				
	Plaques	62	123	0.001
	Scalp	38	63	0.397 (ns)
	Palmo-plantar	28	17	0.002
	Flexural	6	8	0.881 (ns)
	Erythroderma	0	3	nd
Nail psoriasis		15	50	0.01
Patients with active itch		89	145	0.049
Patients with active pain		31	46	0.878 (ns)
Psoriatic arthritis		15	29	0.313 (ns)
Flare-ups/year*	1-2	26	50	
	≥2	15	38	
	Stable disease	61	67	
Familiar history of PS		43	78	0.114 (ns)

**Worsening of psoriasis needing extra medical attenttion*

Results

Patients with psoriasis usually show some alteration in levels of anxiety, depression symptoms or perceived stress (n=187, 62%). There was a clear association between perceived stress with the severity of psoriasis. An association between stress parameters and mood disorders with assessments of the quality of life was observed. The analysis for any of the psoriasis severity indexes showed that HAD, HRAS, MADRS or STAI rating scales detected significant relationship between mood alterations in relation to the severity of the disease. It is interesting to note that the variable DLQI adopted out in isolation for assessment of severity was not related to any of the mood assessments. It therefore appears that PASI or BSA can be indicators of severity appropriate for assessing skin when evaluating an impact in mood. Interestingly Holmes test (LES) is the only one that correlated with both indices separately. The detailed analysis of PASI variable most commonly used in assessing the severity of psoriasis showed a significant relationship with LES, STAI II and PCS (SF-12 physical) tests. The BSA was associated with HAD-depression, LES and MCS (SF-12 mental). (Table 3).

Regarding the presence of cardiovascular comorbidities and toxic habits like drinking or smoking only significant differences were found in relation to the severity of the skin disease with smoking. Regarding previous history of psycho-emotional or psychiatric disorders, we also found no differences between the two groups except for the need for medical treatment in psychiatric patients with severe psoriasis.

When analyzed separately the subtypes of psoriasis, visible forms (scalp / palmo-plantar) hit particularly HAD-anxiety and STAI scales. The classical form of psoriasis in plaques was more likely associated with HAD-depression rating (data not shown).

Table 3: Stress and psychological mood analysis

	HAD-anxiety	HAD-depression	LES	HRAS	MADRS	PDI	STAI I	STAI II	SF-12 physical PCS	SF-12 mental MCS
Rule of tens	ns	0.033	ns	0.018	0.002	ns	0.010	ns	ns	ns
PASI>10	ns	0.061*	0.023	ns	ns	ns	ns	0.001	0.005	ns
BSA>10	ns	0.031	0.042	0.063*	ns	ns	0.058*	ns	ns	0.043
DLQI>10	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns

**Statistical trend*

Conclusions

Psychological stress and other alterations in the affective sphere have a pathogenic role in psoriasis which can be determined by measures in psychological well-being assessment, levels of anxiety, symptoms of depression or stressful events life in these patients. There seems to be, in our experience, an association between perceived stress and psoriasis severity.

Our study adds a comprehensive evaluation of the usual stress level of patients with psoriasis not only when secondary to psychological disorders but also in relation to recent stressful events. Nowadays it is considered necessary to develop a holistic evaluation of the patient suffering from psoriasis which takes into account clinical and psycho-social factors.

References

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