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### RESEARCH ARTICLE

#### SEXUAL DISORDERS IN PSORIATIC PATIENTS

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#### Abstract

**Introduction:** Psoriasis is a common chronic inflammatory dermatosis. Despite the fact that sex life can be severely affected in patients, it is often poorly assessed by clinicians.

**Purpose of the work:** The aim of this work is to determine the impact of psoriasis on quality of life and sexuality, and the main associated factors.

**Materials and Methods:** A prospective descriptive study with a data collection of psoriatic patients followed at the Dermatology consultation at the Military Hospital of Instruction in Rabat, over a period of 07 months from October 2017 to May 2018.

**Results:** Thirty-eight patients were included in our study, with an average age of  $39.5 \pm 12.5$  years. Seventeen patients had a positive family history of psoriasis. This represents (44.7%) of the patients recruited. Twelve patients (31.5%) had other significant comorbidities (arterial hypertension, diabetes, dyslipidemia, obesity, benign prostatic hypertrophy). The average age of the psoriasis was  $14.3 \pm 12.4$  years. The majority of patients (60.5%) had plaque psoriasis, 17 patients (44.7%) had scalp involvement, 11 patients had facial lesions (28.9%), palmar-plantar involvement was present in 21 patients (55.2%), trunk involvement in 32 patients (84.2%), while genital area involvement was present in 19 cases (50%) and lower limb involvement in 34 cases (89.4%). The mean PASI was  $13.1 \pm 11.2$  points. 47.3% of the patients had psoriasis considered mild. The mean DLQI score was 10 points, psoriasis had a moderate effect on quality of life in 34.2% of patients. The majority of patients (55.1%) had erectile dysfunction. More than 34.2% of patients often felt that other people considered their skin problem to be a contagious disease, 47.3% of patients at least occasionally avoided social activities. 39.4% of patients reported feeling social rejection sometimes. The majority of the participants (55.2%) pointed out that their disease occasionally influenced their sexual life, 71% of the patients avoided sexual intercourse to a different extent. When being with their sexual partner, 44.7% of the patients felt embarrassed at least occasionally, and 42.1% of them felt stress before sex. Many patients felt at least some discomfort, if the lesions are present on the visible parts of the body (47.3%) and on the genitals (28.9%), genital involvement was one among the causes both personal and related to the spouse.

**Discussion:** Currently, the evaluation of the severity of psoriasis takes into consideration its impact on the quality of life of the patient. The improvement of the quality of life remains the final objective in the management of psoriasis, the average score of DLQI in our study is 10. Thus, 44.7% of our patients had a score higher than 10, indicating a significant alteration in quality of life due to psoriasis. Comparing our results with the average DLQI scores found in other studies of psoriasis patients, we note that the average score of our patients is similar to that found in most studies. Recent studies have shown that this disease can affect psychosocial well-being and may be linked to an increased risk of depression. However, data on the impact of psoriasis on sex life are still limited, in part because erectile dysfunction is an embarrassing and neglected problem. The prevalence of this condition depends on the study population, in our study as many as 55.1% of patients suffer from erectile dysfunction. In addition to low self-esteem, stigma and decreased confidence, Avoidance of sexual contact due to the disease and feeling of rejection also significantly influenced the quality of life of our patients.

**Conclusion:** In the patients included in our study, psoriasis had a moderate impact on quality of life. The assessment of sexual disorders by the IIEF-5, and the predefined questionnaire gave an idea about erectile dysfunction and emotional problems related to sexual life in psoriatic patients. Thus, it is understood that this is a complex disease that requires multidisciplinary management.

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## ..... **Introduction:-**

Psoriasis is a chronic erythematous squamous dermatosis, polymorphous in expression and non-contagious. It is a complex, poorly understood multifactorial condition involving genetic, immunologic, and environmental factors, and its etiology remains unknown.

Psoriasis has a major impact on the quality of life of patients and has a marked influence on their social and professional aspects. Emotional stress and depression are frequently observed in patients with psoriasis [3]. In addition, psoriatic lesions are often present on visible areas of the skin, causing a sense of stigma [4].

As external appearance plays a large role in interpersonal relationships, it seems very likely that subjects with psoriasis have problems in their sexual life. In addition, some studies suggest that psoriasis is not only a purely skin condition, but may rather be a systemic disorder with a higher prevalence of obesity, diabetes, high blood pressure or heart disease [5-6]. As these comorbidities are well known as disorders associated with erectile dysfunction, it could be suggested that psoriasis may be related to erectile dysfunction as well.

In order to investigate this problem in more detail, we conducted a study to assess the quality of life and frequency of sexual disorders in psoriasis patients followed up in dermatology consultations at the Avicenne military hospital in Marrakech, as well as the co-factors influencing sexual life in this group of patients. Also taking into account the high degree of stigmatization among psoriasis patients, we were also interested in assessing the emotional problems related to sexual life in these men with psoriasis.

## **Patients And Methods:-**

### **Patients:-**

#### **Type of the study:**

This is a prospective descriptive study with data collection of psoriatic patients followed at the Dermatology consultation at the Avicenne military hospital. A descriptive analysis was made.

**Date of the study:**

Prospective study over a period of 06 months, from September 2022 to February 2023.

**Study location:**

An incidental sample of 38 patients with psoriasis was collected at the dermatology consultation at the Avicenne military hospital in Marrakech.

**Study population:****- Inclusion criteria:**

All psoriasis patients were included in the study, male, married, with an age over 18 years, a duration of the disease equal or greater than 6 months. Informed consent was obtained from all included subjects.

**- Exclusion criteria:**

All patients in whom the diagnosis was uncertain were excluded from the analysis.

**Methods:-**

For each patient, we recorded the epidemiological, clinical and evolutionary data. We then proceeded to a thorough face-to-face interview, allowing us to fill in the questionnaire.

Exploitation form, it includes:

The identity of the patient, age, comorbidities, clinical data,

**- Evaluation of the quality of life:**

Evaluation of the impact of psoriasis on the quality of life of patients, using the Dermatology life Quality index (DLQI) [23], which is a self-questionnaire with 10 items, which includes 6 dimensions (symptom, psychic, functioning, relational, sexual and treatment).

**- Sexuality assessment:**

Each participant was asked to answer questions from the 5-item version of the International Index of Erectile Function (IIEF-5) [42], The IIEF-5 score ranges from 5 to 25 points.

In addition, all patients were asked to answer 10 questions about their sex life.

**Statistical analysis:**

A varied univariate descriptive analysis: for categorical variables, we used percentages and for quantitative variables, we used means and standard deviations.

These analyses were carried out using SPSS software and the Excel 2007 spreadsheet.

**Results:-****Patient characteristics:****Age:**

Thirty-eight patients were included in our study, having an average age of  $39.5 \pm 12.5$  years, with extreme ages ranging from 22 years to 81 years.

**Family history of psoriasis:**

Seventeen patients had a positive family history of psoriasis. This represents (44.7%) of the patients recruited.

**Comorbidities:**

Twelve patients (31.5%) had other significant comorbidities:

- Hypertension was found in 5 patients (13.5%),
- Diabetes in 4 patients (10.5%),
- Dyslipidemia in 3 patients (7.9%),
- Obesity in 3 patients (7.9%),
- Benign prostatic hypertrophy in 2 patients (5.2%),
- Arthropathies in 2 patients (5.2%),

- One case of ischemic heart disease (2.6%), And other comorbidities (chronic venous insufficiency of the lower limbs, bronchial asthma, gastroesophageal reflux, anemia, dysthyroidism) in 7 patients (18.4%).

### Characteristics of psoriasis:

#### Age of lesions:

The average age of psoriasis was  $14.3 \pm 12.4$  years with extremes ranging from 8 months to 47 years.

#### Clinical forms of psoriasis:

In our study, the majority of patients (60.5%) had plaque psoriasis, while guttate psoriasis was observed in 10 patients (26.3%),

Pustular and arthropathic psoriasis were clinical forms described in 2 cases each (5.2%), while psoriatic erythroderma was present in one patient (2.6%).

#### Specific localizations:

In our series, 17 patients (44.7%) had scalp involvement, 11 patients had facial lesions (28.9%), palmo-plantar localization was present in 21 patients (55.2%), trunk involvement in 32 patients (84.2%), while genital area involvement was present in 19 cases (50%) and lower extremity involvement in 34 cases (89.4%).

#### PASI score:

The Psoriasis Area Severity Index (PASI) score ranged from 1 to 36 points, with a mean of  $(13.1 \pm 11.2)$  points. 47.3% of patients had psoriasis that was considered mild (score <7). (Table I).

PASI	Number of patients	% of patients
< à 7	18	47,3 %
8 à 12	8	21 %
> à 12	12	31,5 %

**Table I:-** Distribution of patients by PASI score.

#### Quality of life assessment:

The average DLQI score was 10 points, psoriasis had a moderate effect on quality of life in 34.2% of patients, a significant effect in 26.3% of patients and a small effect in 21% of patients. Whereas in 18.4% of patients psoriasis had an extremely large impact on their quality of life.

DLQI	Number of patients	% de % of patients
0 à 1	0	0 %
2 à 5	8	21 %
6 à 10	13	34,2 %
11 à 20	10	26,3 %
21 à 30	7	18,4 %

**Table II:-** Distribution of patients by DLQI score.

#### Sexuality assessment:

##### Erectile dysfunction in psoriatic patients:

In our study, the majority of patients (55.1%) had erectile dysfunction, of which 21% had mild ED, 15.7% had mild to moderate ED, 10.5% had moderate ED and 7.9% of patients had severe ED. While 44.7% of patients had no ED (Table III).

IIEF-5	Number of patients	% of patients
22 à 25	17	44,7 %
17 à 21	8	21 %
12 à 16	6	15,7 %
8 à 11	4	10,5 %
5 à 7	3	7,9 %

**Table III:-** Distribution of patients by IIEF-5 score.

#### Psychosocial and emotional problems related to sexual life:

Patients were asked to answer 10 questions regarding their sexual and relationship life (Tables IVA and IVB).

More than 34.2% of the patients often felt that other people considered their skin condition to be contagious, 47.3% of the patients at least occasionally avoided social activities because of their skin condition, 39.4% of the patients reported sometimes feeling social rejection because of their psoriasis. The majority of the participants (55.2%) pointed out that their disease occasionally influenced their sexual life, 71% of the patients avoided sexual intercourse to a different extent. When being with their sexual partner, 44.7% of the patients felt embarrassed at least occasionally, and 42.1% of them felt stress before sex. Many patients felt at least some discomfort, if the lesions were present on the visible parts of the body (47.3%) and on the genitals (28.9%), genital involvement was one of the causes both personal and related to the spouse. A total of 68.3% of the participants stated that their sexual activity decreased due to their dermatological disease.

## Discussion:-

### The impact of psoriasis on quality of life:

Because of its conspicuous nature, psoriasis profoundly affects the self-image and the perception of the patient by those around him [18]. It is a disease that has been linked to social stigmatization, pain, discomfort, physical disability and psychological distress [19], as well as the influence of the psyche on the frequency and intensity of flare-ups is no longer in doubt.

Many questionnaires were used in this sense, and the choice of the means of The choice of measurement method will depend on the objective of the study. The Dermatology Life Quality Index (DLQI) is a scale developed in 1994 by Finlay and Khan to measure the impact of quality of life in patients with dermatological diseases [23]. It is based on ten questions rated from 0 to 3, covering pruritus, general discomfort, interference with clothing, leisure, sport, sexuality and work [24].

The mean DLQI score in our study was 10. Thus 44.7% of our patients had a score greater than 10 indicating significant impairment of quality of life by psoriasis. Comparing our results with the average DLQI scores found in other studies of psoriasis patients, we note that the average score of our patients is similar to that found in most studies (Table IV).

Auteurs/Pays	Année	Nombre de cas	Moyenne DLQI
F. Valenzuela et al. Chile [25]	2010	153	14
A. Kouris et al. Grece [26]	2015	84	12,61
H. Benchikhi et al. Maroc [27]	2013	40	11,15
AK. Wahl et al. Norvège [28]	2006	85	10,6
E. Mazotti et al. Italie [29]	2005	900	8,8
<b>Notre étude</b>	<b>2018</b>	<b>38</b>	<b>10</b>

**Table V:-** DLQI results in selected studies in patients with psoriasis:

### The impact of psoriasis on sexuality:

Psoriasis has been shown to have a significant impact on patients' quality of life. Recent studies have shown that this disease can affect psychosocial well-being and may be linked to an increased risk of depression. However, data on the impact of psoriasis on sex life are still limited, in part because erectile dysfunction is an embarrassing and neglected problem. The prevalence of this condition depends on the population studied, but as many as 50% of men between the ages of 40 and 70 suffer from erectile dysfunction [30,31].

Erectile dysfunction can be caused by many factors, including: aging, cardiovascular diseases such as hypertension, diabetes mellitus, hormonal insufficiency, neurological problems, side effects of medications and many others. The mechanism of this disorder may not only be organic, but also psychogenic, and may have a profound psychological impact on sexual life [32].

In our study, low self-esteem, stigma and decreased confidence were associated with lower quality of life as measured with DLQI. Avoidance of sexual contact due to the disease and feelings of rejection also significantly influenced patients' well-being.

We would like to point out that patients with psoriasis have a higher prevalence of anxiety and depression, as well as the increased risk of cardiovascular diseases and metabolic syndrome, which may influence the development of erectile dysfunction [38]. In our study erectile dysfunction was independent of comorbidities, which can be

explained by the young age of our patients (mean age was  $39.5 \pm 12.5$  years), in whom psychological factors play a more important role than metabolic disorders.

### Conclusion:-

Psoriasis is a non-contagious chronic inflammatory erythematous-squamous dermatosis that can start at any age. It is a complex disease whose symptoms can be very serious and which can alter the quality of life of the patient. It is a complex disease whose management, to be adequate, must be multidisciplinary.

Quality of life in chronic diseases is now becoming a major issue in the health field. At the end of this study, we note that:

- Quality of life is reduced with moderate impact in patients with psoriasis.
- The assessment of sexual disorders by the IIEF-5, and the pre-established questionnaire gave an idea of the profile of sexual disorders and emotional problems related to sexual life in psoriatic patients.

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