

INDICATORS' ANALYSIS IN ORDER TO ASSESS THE SEVERITY OF THE DISEASE AND THE QUALITY OF LIFE IN THE PATIENTS WITH PSORIASIS

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Abstract: Background: Psoriasis is a chronic disease that affects the quality of the patient's life. Lately, there is a special interest to improve the quality of life in the patients with chronic diseases. Methods: We performed a prospective study on 80 patients with psoriasis over a period of 12 months. We examined the severity index of the disease (Body Surface Area, Psoriasis Area and Severity Index, Nail Psoriasis Severity Index) and the quality of the patients' life with psoriasis (by using the Dermatological Life Quality Index). Results: The most frequent clinical form was the vulgaris form (72,32%). Over ½ of all the cases had feelings of embarrassment due to the injury, had severe itching, had problems in their personal and social life, had a decrease of domestic activities and had undergone many treatments at home. The majority of the hospitalized patients had moderate and severe forms of the disease (91,25%). Over ½ of the patients had skin lesions on 10-30% of the body surface. In our group of study, 76,25% of the patients had nails changes. Conclusions: The indicators for assessing the severity of psoriasis and the alteration of the quality of the patients' life are particularly useful in clinical practice representing useful criteria in choosing the appropriate treatment schemes, helping us monitoring the evolution of the disease.

Cuvinte cheie: psoriazis, calitatea vieții, PASI, BSA, NAPSI

Rezumat: Introducere. Psoriazisul este o afecțiune cronică în care calitatea vieții pacienților este afectată. În ultimul timp există o preocupare tot mai intensă în ce privește îmbunătățirea calității pacienților cu boli cronice. Designul studiului. Am realizat un studiu prospectiv pe 80 de pacienți cu psoriazis internați în Clinica de Dermatologie Sibiu în ultimul an. La acești pacienți am apreciat indicatorii de severitate ai bolii (suprafața cutanată afectată, severitatea erupției și afectarea unghială) și calitatea vieții pacienților cu psoriazis (utilizând un chestionar standard). Rezultate. Psoriazisul vulgar a fost cea mai frecventă formă clinică de boală (72,32%). Peste ½ din pacienți au recunoscut că au încercat sentimente de jenă datorită bolii, au avut prurit sever, probleme în viața personală și socială, reducerea activităților casnice și au irosit mult timp prin efectuarea terapierii repetitive. Majoritatea pacienților au avut forme moderate și severe de boală (91,25%). La peste ½ din pacienți leziunile psoriazice s-au localizat pe 10-30% din suprafața cutanată. La lotul nostru am pacienți, afectarea unghială a fost prezentă la 76,25% din cazuri. Concluzii. Indicatorii de severitate ai bolii și alterarea calității vieții pacienților cu psoriazis sunt criterii importante pentru selectarea unor scheme terapeutice cât mai eficiente și pentru monitorizarea evoluției bolii.

INTRODUCTION

Psoriasis is an inflammatory and proliferative disease with chronic benign evolution, affecting approximately 2% of the population. The prevalence of the disease in Romania is 2-3%, but the real number of patients with psoriasis in our country isn't known accurately yet.

The most common form of psoriasis is the vulgar form (representing 80-90% of the cases) and the early onset of the disease is associated with the development of more severe forms. Psoriasis eruption severity is variable, most often patients have mild / medium forms of the disease, but in approximately 10% of the cases the disease is severe. Currently, to assess the severity of eruptive episodes we need to take into account of the affected area and the intensity of skin redness, scales and skin infiltrations.

The nail changes in patients with psoriasis are better correlated with psoriatic arthritis. Nail involvement is variable, between 10% and 78% and this percentage increases to 80% - 90% in patients with psoriatic arthropathy.(8)

Due to the chronic and progressive nature of the disease, psoriasis can decrease the quality of the patient's life. In

psoriasis, using modern therapies with monoclonal antibodies or other immuno-biological agents can be achieved a significant improvement in the quality of the patient's life.

PURPOSE OF THE STUDY

- Assessment of the quality of the patient's life with psoriasis using the dermatological questionnaire of the quality of the patient's life - **DLQI** (Dermatological life quality index).
- Analysis of indicators of the severity of the disease:
 - **BSA** (Body Surface Area)
 - **PASI** (Psoriasis Area and Severity Index)
 - **NAPSI** (Nail Psoriasis Severity Index).

MATERIAL AND METHOD

We studied a group of 80 patients with psoriasis hospitalized in the Dermatology Department of the Clinical Hospital of Sibiu, between 1 January 2008 and 31 December 2008. The study group was made up of 13 women (16,25%) and 67 men (83,75%). In our study the patient's age was between 15 and 83 years old (average age 51 years old).

The followed parameters were:

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CLINICAL ASPECTS

- The influence of the psoriasis on the patients' quality of life (DLQI)
- The indices of disease severity (BSA, PASI)
- The degree of damage of the nails (NAPSI).

The following parameters were evaluated during periods of exacerbation of the disease when the patient presented himself to the dermatologist. These indicators have been performed in hospitalized patients.

The decreasing quality of life in patients with psoriasis could be appreciated by filling in a questionnaire - DLQI which sought the presence or absence of:

- Pruritus
- feelings of embarrassment due to the disease
- reduction of activity in household
- influencing clothing
- problems in social life
- difficulty in practicing sports
- problems at work
- problems in their personal and relational life
- sexual problems
- discomfort due to repeated treatment

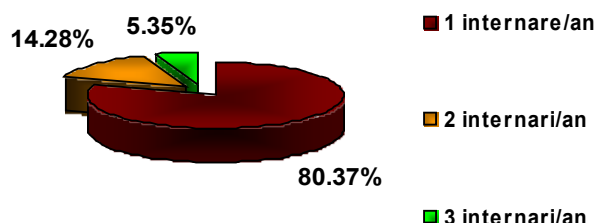
Symptoms were assessed for the last week and the DLQI questionnaire reveals the current status of the patients.

To appreciate the extension of the eruption we assess the affected body surface area expressed as a percentage (BSA index). To calculate the PASI score we corroborated the following parameters:

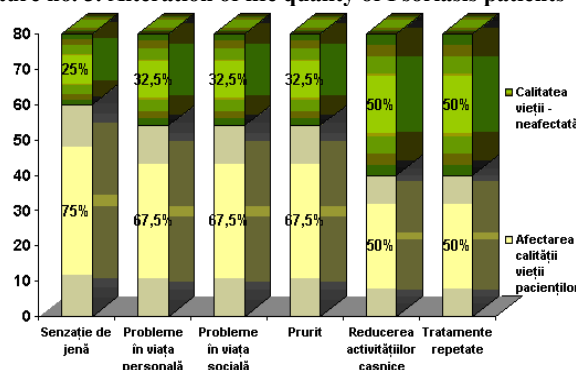
- the intensity of the redness, of the scales and the infiltration on a scale from 0 (no lesions) to 4 (high intensity)
- the affected skin area on a scale from 0 (no lesions) to 6 (over 90% of the affected skin).

- 67,5% had problems in their personal and social life
- 50% had a decrease of domestic activities
- 50% had made many treatments at home (Picture no. 3).

Picture no. 2. Graphic representation of the hospitalisations/patient/year

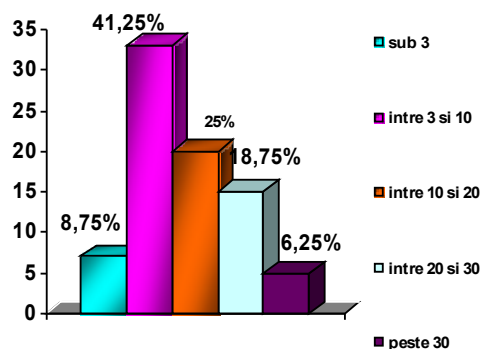


Picture no. 3. Alteration of life quality of Psoriasis patients



The average of the PASI score allowed us to appreciate the disease severity. Most hospitalized patients had moderate and severe forms of the disease (91,25%). Almost ½ from this cases (41,25% from all the cases) had moderate forms of the disease. In 50% of all the cases the patients presented severe forms of psoriasis and the PASI score was over 10 (Picture no. 4)

Picture no. 4. PASI score of the study patients



The analysis of BSA index showed us that over 1/2 of the patients studied had skin lesions on 10-30% of the body surface (56,25%) and in 11,25% the skin lesions occupied over 40% of the body. Almost ¼ of the cases (23,75%) had skin lesions in 30-40% of the body surface (Picture no. 5).

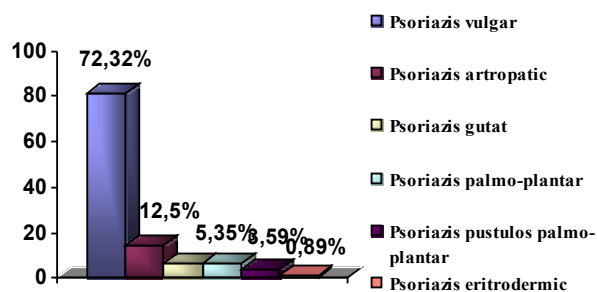
For assessing the nail changes in patients with psoriasis we use the NAPSI score. The observed parameters were: leukonychia, pitting, nail crumbling, red spots, hyperkeratosis, salmon patch, onycholysis and splinter

RESULTS

In the studied patients the most frequent clinical form encountered was the vulgaris form (72,32%). Other forms of clinical disease, in our lot were: psoriatic arthropaty (13,39%), guttate psoriasis (5,35%), palmo-plantar psoriasis (5,35%) and palmo-plantar pustulosis Barber (3,59%) (Picture no. 1).

Over 2/3 of the studied cases (80,37%) had only one eruptive episode that required a hospitalization in the last year, 14,28% of the patients needed 2 admissions per year and 5,35% required 3 admissions per year due to the severity of the eruption (Picture no. 2).

Picture no. 1. Psoriasis clinical forms in the study batch



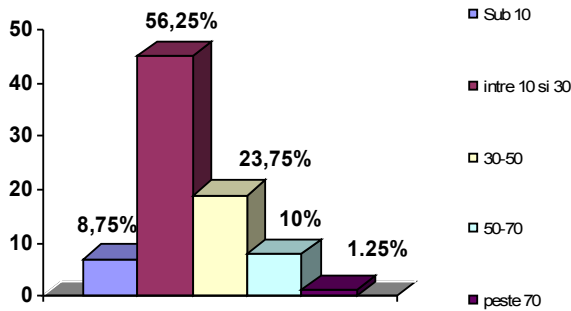
By processing the data obtained from DLQI questionnaire we observed a significant alteration of the quality of the patient's life with psoriasis, as follows:

- 75% of the patients had feelings of embarrassment due to the injury
- 67,5% had severe itching

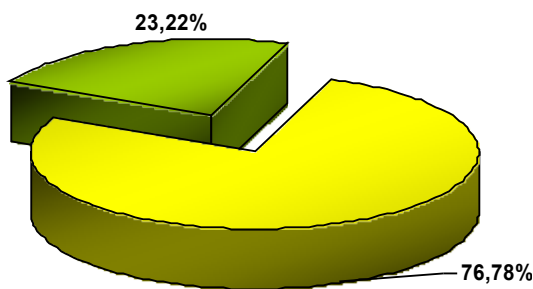
CLINICAL ASPECTS

hemorrhages.

Picture no. 5. Graphic representation of BSA in the study patients



Picture no. 6. NAPSII in the study patients



■ Cu modificări unghiale ■ Fără modificări unghiale

In our group of study, 76,25% of the patients had changes of the nails (Picture no. 6). Leukonychia and pittings were the most frequent nails changes in our patients (24,59%).

DISCUSSION

It is well known that psoriasis is an inflammatory and proliferative disease with chronic evolution and recognize plurifactorial determinism. The interaction of determining factors (genetic factor) with environmental and immunological factors may cause the onset of the disease or relapse.(3)

The most common form of psoriasis is the vulgar form (representing approximately 80-90% of the cases) and the early onset of the disease is associated with the development of more severe forms. In our study the vulgar form of psoriasis was seen in about $\frac{3}{4}$ of the cases (72,32%). In 12,5% of the cases the diagnosis was arthropathic psoriasis where the quality of the patient's life is significantly affected.

Currently, to assess the severity of the eruptive episodes we take into account the affected skin area (BSA) and the intensity of redness, of the scale and the infiltration of the skin (PASI). These parameters allow us to appreciate the severity of the eruptive episode and to decide a therapy adapted to clinical and evolutive forms of the disease.(2,5,11)

The severity of psoriasis eruptions is variable. In a study with 125 patients the severity of the skin lesions was appreciated by PASI score. This revealed that 91,2% of the patients had moderate and severe forms of the disease with a predominance of moderate forms. In our study group we also observed a predominance of cases with moderate and severe eruptions of the disease (91,25%), but according to the PASI score with predominance of severe forms. The large number of cases with moderate and severe forms of the disease can be explained by the fact that the study was performed on

hospitalized patients that presented themselves with severe forms of the disease. The lower compliance of the patients to the treatment and their late presentation at dermatologist was also an important factor.

The nail changes in patients with psoriasis are better correlated with the arthropathic form of the disease. In published studies the nail changes in 15 - 50% of the patients with psoriasis are recognize, especially in patients over 40.(9) In our study the percentage is higher, the nail changes were present in 76,78% of the cases. In literature the greater incidence of nail changes in patients over 40 years, with psoriasis is recognize; the results of our study, also support these data (the average age of our patients was 51). The NAPSII score does not provide data on the subjective symptoms of the patients, pain, embarrassment and decreasing the quality of the patients' life. Consequently, today, t experts are trying to build another index to evaluate the nails in their dynamic (pain, function, embarrassment, etc.) which is more appropriate and more complex - NAPPA. Very recently, a publication presented and validated a scale dedicated to the evaluation of the impact of nail psoriasis on patient's quality of life.(8)

Due to the chronic and progressive nature of the disease, psoriasis has a negative impact on the quality of the patient's life. Thus, patients have feelings of embarrassment due to the disease, which influence their personal and relational life, the clothes they wear, the difficulty in practicing sports and the discomfort due to repeated treatments.(4,6,10)

In order to improve the quality of the patient's life the therapeutic schemes applied were improved but unable to obtain the healing of the disease. The challenge in this disease is to maintain a longer period of remission and a better quality of life. The use of quality of life questionnaires has allowed a real appreciation of the impact of psoriasis on them.(4,6,10) In our study the patients experienced feelings of embarrassment due to the disease (in 75% of the cases), difficulties in their personal and social life and pruritus (67,5%), with a reduction of their activity in the household and discomfort due to repeated treatments (in 50% of the cases). Using systemic therapies and modern therapies with monoclonal antibodies or antiTNF α for moderate and severe forms of the disease allowed us a more rapid improvement of symptoms with a more efficient control of the disease and with significant improvement of the quality of these patients' life.(1,7)

CONCLUSIONS

- The objective appreciation of the severity of the disease and the impact that psoriasis has on the quality of the patients' life using reliable indicators such as BSA, PASI, NAPSII and DLQI.
- By PASI analysis, in our study most of the cases had moderate and severe forms of the disease (91,25%).
- The quality of the patients' life with psoriasis has been altered, so, 75% of the patients experienced feelings of embarrassment due to the disease, 67,5% had problems in their personal and social life and complained of intense pruritus, 50% had a decrease of domestic activities and discomfort due to repeated treatments.
- The nail changes rated by NAPSII were present in 76,78% of the studied patients.
- The indicators for assessing the severity of psoriasis and the alteration in the quality of the patients' life are particularly useful in clinical practice being concrete criteria that allow a selection of appropriate treatment schemes and helping us for monitoring the evolution of the disease

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