

Correspondence: Laura STĂTESCU

Address: "Sf. Spiridon" Hospital, Dermatovenereology Clinic
No. 111 Str. Ciurchi, Iași, Romania
E-mail: laura.statescu@yahoo.com

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EVALUATION OF QUALITY OF LIFE AND PSYCHOSOCIAL IMPACT IN PATIENTS WITH CONTACT DERMATITIS

**Laura STĂTESCU, Dan VÂȚĂ, Alina STÎNCANU,
Laura GHEUCĂ-SOLOVĂSTRU**

Laura STĂTESCU – M. D., Ph. D., Assistant Professor, Department of Dermatovenereology; "Gr. T. Popa" University of Medicine and Pharmacy, Iași; Specialist in Dermatovenereology, Dermatovenereology Clinic; "Sf. Spiridon" Hospital, Iași, Romania

Dan VÂȚĂ – M. D., Ph. D., Assistant Professor, Department of Dermatovenereology; University of Medicine and Pharmacy "Gr. T. Popa", Iași; Specialist in Dermatovenereology, Dermatovenereology Clinic; "Sf. Spiridon" Hospital, Iași, Romania

Alina STÎNCANU – M. D., Ph. D., Specialist in Dermatovenereology, Dermatovenereology Clinic; "Sf. Spiridon" Hospital, Iași, Romania

Laura GHEUCĂ-SOLOVĂSTRU – M. D., Ph. D., Assistant Professor, Department of Dermatovenereology; "Gr. T. Popa" University of Medicine and Pharmacy, Iași, Senior dermatovenerolog, Dermatovenereology Clinic; "Sf. Spiridon" Hospital, Iași, Romania

ABSTRACT:

Contact dermatitis is one of the most known diseases from dermatological practice, with an important impact on the patient's quality of life. The health planning is becoming increasingly patient-orientated, so the instrument of measuring of quality of life became more important in the medical practice. Contact dermatitis is usually associated with depression, anxiety, social problems, etc. because of its chronic evolution periods of acutisation, with an important impact on social life, family life, work, etc. The DLQI (Dermatology Quality of Life Index) was used on a group of 70 patients trying to evaluate the impact of contact dermatitis in the patient's quality of life, in the moment of diagnose and six months after. The result indicates important improvements of the quality of life in patients with a clear diagnose and identification of the allergen in cause, compared with the patients in which the allergen remained unknown.

Keywords: contact dermatitis, quality of life, DLQI, contact allergen

REZUMAT:

Dermatita de contact este unul dintre cele mai cunoscute diagnostice din practica dermatologică, cu un impact semnificativ asupra calității vieții pacienților. Managementul sanitar devine din ce în ce mai orientat spre pacient, astfel încât instrumentele de măsurare a calității vieții joacă un rol important în practica medicală. Dermatita de contact este asociată, în mod obișnuit, cu depresie, anxietate, probleme sociale etc., din cauza evoluției cronice, marcate de perioade de acutizare, cu impact major asupra vieții sociale, familiale, asupra activității profesionale etc. Chestionarul DLQI (Dermatology Quality of Life Index) a fost utilizat pe un lot de 70 pacienți pentru a aprecia impactul dermatitei de contact asupra calității vieții, în momentul diagnosticului, dar și la șase luni de supraveghere post-diagnostic. Rezultatele obținute indică o ameliorare semnificativă a calității vieții în cazul pacienților la care s-a identificat alergenul de contact comparativ cu cei la care alergenul a rămas necunoscut.

Cuvinte-cheie: dermatita de contact, calitatea vieții, DLQI, alergen de contact

INTRODUCTION

Contact dermatitis, occurring in response to application of a chemical agent to the skin, is a condition known from ancient times, as a separate entity in dermatologic pathology. History of dermatology can offer hundreds of cases of contact dermatitis, some suggestive, anecdotal, but all with an important impact on the quality of patient's life¹.

What is Quality of Life (QoL)?

The quality of life, from a medical point of view, is defined by the patient's ability to enjoy a normal life in every way (family, professional, interpersonal relationships, etc.)². This term dates from 1970 and was introduced as a reflection of a holistic approach to the patient, and involves two aspects: an objective aspect (clinical and investigative) and a subjective one (assessed by the patient). The difference between the two aspects is induced by various factors: cultural, economic, factors of the medical system, etc.

The evaluation of the quality of life of patients with acute or chronic diseases can be achieved with many instruments: Short Form 36 (SF-36), Euroqol-5 or Sickness Impact Profile – can be used in any condition, allowing comparisons between skin diseases and other etiologies, but not with a very high sensitivity, World Health Organization of Life Scale (WHOQoL-BREF), European QoL Scale (EQ-SD), the Nottingham Health Profile (NHP), Sickness Impact Profile (SIP), Dermatology Life Quality Index (DLQI). There are specific questionnaires diseases: DLQI-DC (contact dermatitis – used in some countries), Infant's Dermatitis Quality of Life Index (IDQOL), Dermatology Quality of Life Scales (DQoLS), Skindex, Dermatology-specific Quality of Life instrument, etc.²⁻⁴

One of the most used questionnaires is DLQI (Dermatology Life Quality Index), intended for use by patients over 16 years. It is easy to use, requires only five minutes to be completed without involving additional explanations from medical staff. DLQI questionnaire can be used in patients with contact dermatitis, to assess the impact of disease in the professional, social and personal⁴ activity.

MATERIAL AND METHOD

The study was conducted on a group of 70 patients diagnosed with contact dermatitis in Dermatology Clinic, "St. Spiridon" Emergency Hospital. The 70 patients were divided into two subgroups based on associated pathology: subgroup 1 – 40 patients with contact dermatitis and chronic venous disease and subgroup 2 – 30 patients with contact dermatitis and atopic dermatitis. Each of these patients had clinically diagnosed as suspected contact dermatitis and patch testing was performed to identify contact allergens.

To assess the impact of skin disease on the patient's quality of life, the DLQI questionnaire was used. This questionnaire includes 10 items, each with multiple choices. Each item is scored from 0 – 3, so the maximum score is 30 and minimum it is 0.

Interpretation of results is given by the value of the obtained score:

0 – 1	no effect on the patient's life
2 – 5	little effect on the patient's life
6 – 10	moderate effect on patient's life
11 – 20	effect on patient's life
21 – 30	very important effect on patients' life

Another possible interpretation is related to the significance of responses:

Symptoms and feelings	Questions 1, 2	High score 6
Daily activities	Questions 3, 4	Score within 6
Recreation	Questions 5, 6	Score within 6
School/profession	Question 7	Score within 3
Personal Relationships	Questions 8, 9	Score within 6
Treatment	Question 10	Score within 3

RESULTS

From the 70 patients in the study group, 48 (68.57 %) had positive skin tests, with identification of contact allergen involved in the development and exacerbation of skin lesions: 28 patients in subgroup 1 (chronic venous disease) (70 %) and 20 patients in subgroup 2 (atopic dermatitis) (66.67 %).

Patients in subgroup 1, with chronic venous disease, CEAP class VI had significantly higher scores than those in subgroup 2, with atopic dermatitis: minimum 15 – maximum 30 (average 21.2) (Figure 1) *versus* at least 7 – up to 25 (mean 16.67) at the initial assessment, and minimum 12 – maximum 25 (average 16.95) *versus* minimum 0 – to maximum 13 (average 6.93) in control of six months (Figure 2).

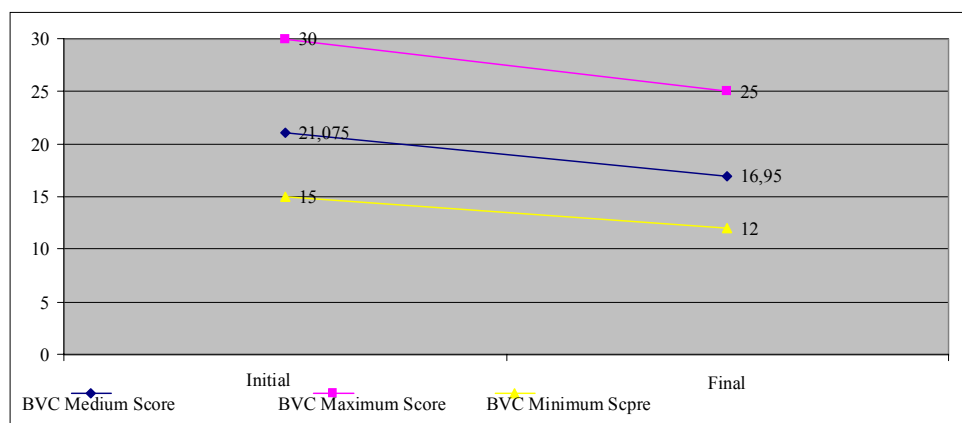


Figure 1: Evolution of scores for patients with venous chronic disease and contact dermatitis

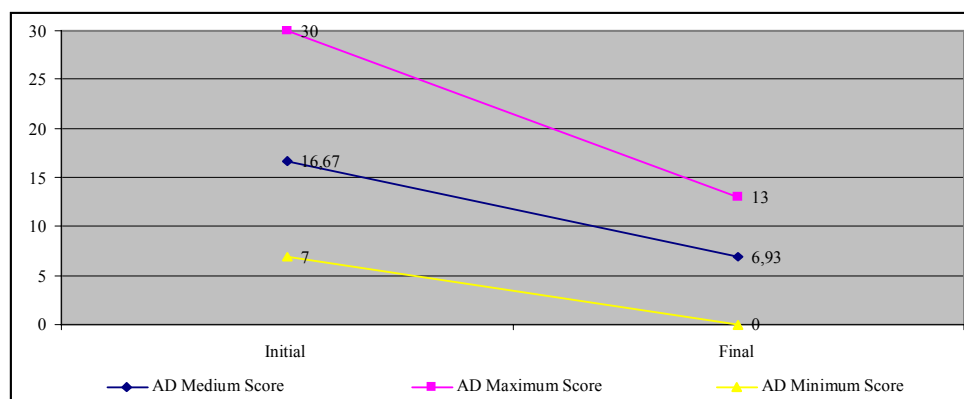


Figure 2: Evolution of scores for patients with atopic dermatitis and contact dermatitis

From average values for the two subgroups, there is a significant improvement in the quality of life in the group of patients with atopic dermatitis associated with contact dermatitis, from 16.95 to 6.93, compared with the one given in subgroup of patients with contact dermatitis and venous chronic disease, from 21.2 to 16.67 (Figures 3, 4).

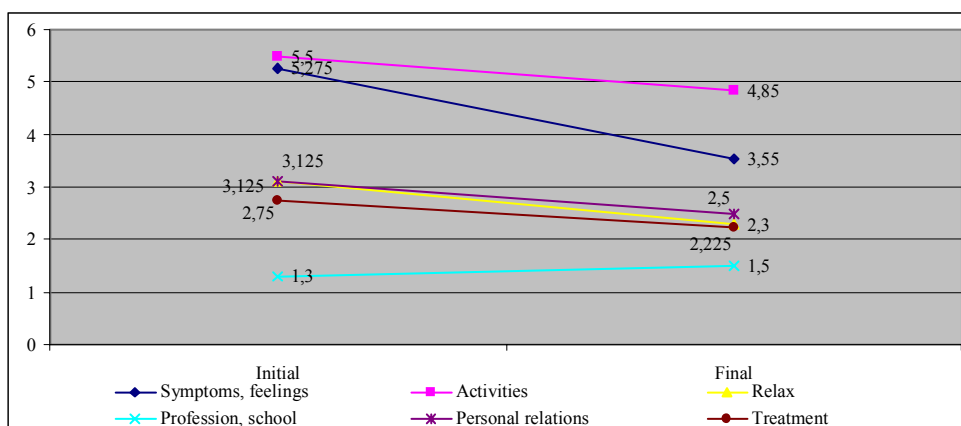


Figure 3: Distribution of responses on items in the group of patients with contact dermatitis and chronic venous disease

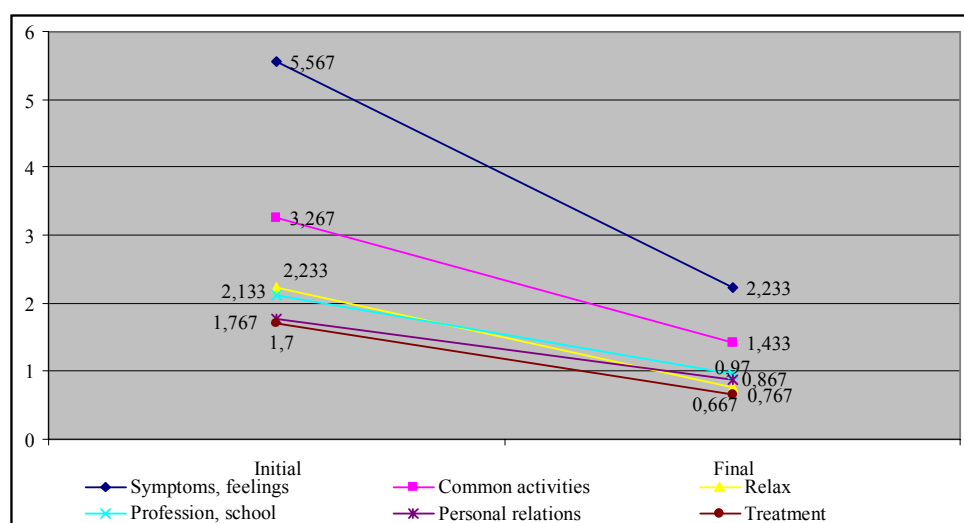


Figure 4: Distribution of responses on items in the group of patients with contact dermatitis and atopic dermatitis

Evolution of scores in subgroups of patients and items is suggestive for improved quality of life of patients with contact dermatitis, secondary to involved allergen identification, the introduction of preventive measures (primary, secondary, tertiary), both to avoid further contact with the incriminate allergen, and on proper skin care, in terms of hydration and emoliation.

Analysing individual data observed significant decrease of DLQI score particularly in patients with positive skin tests. This development indicates the importance of identifying contact allergens and to establish preventive measures. A reduction in DLQI score observed in patients with negative skin test results explained by establishing proper skin hygiene with products that restore and protect the skin barrier, resulting in decreased skin aggression in contact with different allergens or irritants.

DISCUSSION

It is clear that contact dermatitis changes the quality of life of patients, with important consequences on the personal (physical and psychological), social and occupational life. In the cases with lesions located on exposed areas and with chronic evolution, one of the most common complication meet is the depressive syndrome. In other cases, the patients have a state of anxiety, with aggravation in time, transforming the status in disease. In this context, using DLQI and DLQI-CD earns a place in the proper management of patients with contact dermatitis, mainly in the cases associated with depression, anxiety and with important changes in the psychological status of the patient.

DLQI was used in approximately 36 skin problems, as over 130 articles and abstracts published in 17 countries and 21 languages, but it was never used in Romania to evaluate the quality of life of patients with dermatitis contact^{1,2}.

Use of DLQI has allowed reassessment in various dermatological diseases; DLQI-CD is used in some countries to determine the impact of contact dermatitis on quality of patient life⁵⁻⁷.

Data from our study overlap previous test results⁵⁻⁷ was noted only two studies where the patients were tested by patch tests to assess their impact on quality of life of patients with contact dermatitis: Thompson *et al.* (2002), Woo *et al.* (2003). In these 179 patients were studied, the mean score ranging from 8.7 to 5.5 before skin tests to two months after the evaluation and establishment of preventive measures. The decline in our study group is more important (contact dermatitis associated with chronic venous disease: initial 21.2 – 16.67 to six months, contact dermatitis associated with atopic dermatitis – originally 16.65 – 6.93 to six months), the explanation appearing from the fact that patients had a definite diagnosis of contact dermatitis and associated pathologies also had a major impact on patients' quality of life.

Due to the enormous base of existing contact allergens (over 65.00 U.S. identified in 1993 by the National Research Council), due to increased risk of cross reactions, simple measure to avoid incriminated allergen can produce significant changes in the patient's life, both in professionally and personally terms.

CONCLUSIONS

International studies results are controversial, showing the importance of these questionnaires that assessed patients' quality of life.

Severe impact of early disease is an important predictor for unfavourable evolution of the disease, with important association like depression and anxiety. Assessment of disease severity at onset may be a useful tool in identifying patients at risk for disease development train, associated with marked absenteeism from work.

It is clear that contact dermatitis causes a significant decrease in patient's quality of life, using DLQI for these patients is extremely important for proper management in long term illness.

ACKNOWLEDGMENTS AND DISCLOSURE

The authors declare that they have no potential conflicts of interest to disclose.

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