Chronic idiopathic urticaria impacts on patients' quality of life, in Saudi Arabia.

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Abstract— Chronic idiopathic urticaria (CIU) is a debilitating allergic skin disease that can have a profound influence on the patients' quality of life and their ability to perform the usual daily activities. It is a highly complex relation to its etiology. In addition to the classic symptoms, like pruritis and papuloues, other factors are more relevant in patients with CIU, such as the unpredictability of flares, sleep disorders, fatigue, drug-related side effects, and physical appearance. We aim in this study to evaluate the quality of life in patients with CIU in Saudi Arabia. The Dermatology Life Quality Index (DLQI) was used to measure the quality of life in 100 patients with CIU. Clinical and socio-demographic characteristic of patients were studied, such as age, sex, etiologic diagnosis of CIU, duration of disease and quality of life score. 66% of patients were females and 34% were males. CIU showed to affect 87% of the population where 41% suffered from a very large effect on their quality of life according to DLQI scoring system.

Keywords— Dermatology index, DLQI, Chronic idiopathic urticaria, CIU, Quality of life, Saudi Arabia, Urticaria.

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1 Introduction

Chronic idiopathic urticaria (CIU) is one of the most common skin disorders and it is the fourth most important allergic disorder after asthma, rhinitis and drug allergy [1]. It is characterized by Spontaneous erythematous wheals, intense itchiness, and it could be fatal if it was associated with angioedema that left untreated [2,3]. In the majority of patients with CIU, the etiology is unclear, leading to difficulties in the treatment and high rates of recurrence [4]. So, this may contribute to impaired quality of life (QoL) of these patients. It affects the patient's physical, health, and mental status. A control study of two-matched age and sex groups of CIU patients and healthy individuals shows that CIU patients had significantly higher Beck Depression Inventory (BDI), and Beck Anxiety Inventory (BAI), and markedly lower physical and psychological health subscale scores of the World Health Organization Quality of Life assessment-Brief (WHOQOL-BREF) [5]. Because urticaria afflicts approximately 10-20% people at least once in their lives, putting QoL of these patients into consideration is a must [1].

There are several instruments to assess the QoL in individuals with skin diseases. The Dermatology Life Quality Index (DLQI) was the first dermatology-specific instrument to assess the QoL impairments resulting from skin diseases [6,7]. DLQI had been translated into more than 50 languages and was used to assess the QoL in patients with more than 30 skin conditions and evaluating the efficacy of the treatment and the intervention. [4] In this study, we used the DLQI to evaluate the patients with CIU in Saudi Arabia to identify the extent of the quality of life (QoL) impairment in these patients.

3 METHOD

A cross sectional study of 100 patients who were diagnosed with CIU in a variety of dermatology clinics in Saudi Arabia. A self-administered questionnaire using the DLQI was distributed to those patients and their responses were collected. Dermatology quality of life index (DLQI) is a dermatology score consist of 10 questions that are related to skin problems

and their impact on the patient's quality of life over the last week. It ranges from 0-30, where 0 has no effect at all on patient's QoL and 30 has extremely large effect on patient's QoL.

4 RESULTS

This study was conducted on 100 patients diagnosed with CIU who were selected randomly from various dermatology clinics around the Kingdom of Saudi Arabia. The number of female patients was 66 (66%), 6 of them were pregnant. While the number of males were 34 (34%). The age of our patients ranged between 12 and 59 years, with mean age of 31 years. Using the DLQI questionnaire, we found that in 13% of our population the DLQI score was 0-1 which means urticaria didn't have any effect on their life. While in equal percentage (13%) urticaria had extremely large effect on the patients' life with DLQI score of 21-30. Whereas, 18% had DLQI score of 2-5, indicating small effect of urticarial and 15% of the patients had a DLQI score of 6-10 signifying that urticaria had moderately affected their life. Unfortunately, urticaria had a very large effect on the majority of our patients (41%) with DLQI score of 11-20 (see Table 1). The average DLQI score was almost the same among males and females, which was 12 and 11, respectively. Interestingly, the DLQI score was higher among pregnant ladies with an average of 19, while the average was 15 in the rest of the study population.

4 Discussion

Urticaria is one of the most common complaints presenting in everyday practice in dermatology and emergency departments. Chronic Idiopathic urticaria is defined as the appearance of wheals more than twice a week for more than 6 consecutive weeks [8]. Many dermatological scores were used to asses CIU. It ranges from general dermatological scores to specific CIU scores. Two scores are valid to assess CIU particularly, *Chronic Urticaria and Quality of Life Questionnaire (CU-Q20L)* and uricaria severity score (USS). The primary idea of

this study was to use the (*DLQI*) along with the (*CU-Q2oL*) in patients with CIU but the lack of an Arabic version of the latter led to using the (*DLQI*) only.

In our study, CIU affects the QoL of 87% of patient's where 41% of them suffered from a very large effect. Unsurprisingly, Similar studies revealed that CIU is compromising the patients' QoL [9]. Since our population comprises non-equal gender numbers (34% male, 66% female) the comparison of DLOI score cannot be established between the two groups. However, the prevalence of chronic urticaria was higher in women (85.72%) in a study in UK [10]. Moreover, urticaria severity couldn't be assessed using the urticaria activity score (UAS) since it is a 7-days self assessment questionnaire of wheals and pruritus and our questionnaire was one time contact with patients. Disease severity is shown to have markedly effect on the self-perception, mental status, social function, and leisure activities while treatment-induced restrictions were significantly associated with increased CIU duration [11]. A study in Germany showed that QoL was markedly reduced with CIU more than other urticaria types or other allergic diseases, and there is was no link between level of education and economic status with occurrence of CIU [12]. A comparative study of atopic dermatitis, psoriasis and chronic idiopathic urticaria (CIU) effect on QoL was done in France and it showed that all of the three disorders had affected the QoL from a different aspect because of the difference between the diseases' nature and treatment options and it determined the severe Impairment that is caused by CIU which is often underestimated [13].

7 CONCLUSION

CIU has negative effect on patients' quality of life in Saudi Arabia and more studies of improving those patients' QoL are needed.

4 REFERENCES

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TABLE 1

DLQI score	Percentage of patients	Interpretation of the score
0-1	13%	No effect at all on patient's life
2-5	18%	Small effect on patient's life
6-10	15%	Moderate effect on patient's life
11-20	41%	Very large effect on patient's life
21-30	13%	Extremely large effect on patient's life

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