

Editorial



Impact of Chronic Urticaria on the Self-Assessed Health Status

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► See the article “Health-Related Utility of EQ-5D in Korean Adults With Chronic Urticaria: Mapping From Urticaria Outcome Measures” in volume 12 on page 599.

Urticaria is a very common cutaneous allergic disease that about 20% of the general population has experienced more than once in a lifetime, a raised wheal and surrounding erythema with itching sensation due to chemical mediators such as histamine. Long lasting wheal and erythema over 6 weeks has been reported as the chronic urticaria (CU), with a prevalence of up to 3%. Although urticaria is not a serious disease by itself, but it worsens and turns around, deteriorating the patient's quality of life and hindering work and school life.¹

Although CU is a very common disease, no special laboratory test has been established to assess the level of disease control or its prognosis. Accordingly, several questionnaires have been developed and used in the clinical situation that can measure the degree of symptom severity and disease activity. For example, Urticaria Activity Score over 7 days (UAS7), where patients self-assess the number of wheals and the level of itching sensation that occurred for 1 week, can reflect the activity of the disease.^{2,3} Urticaria Control Test (UCT), which evaluates how well the urticaria has been controlled in the past 4 weeks. Chronic Urticaria-specific Quality Of Life (CU-QOL) is a quality of life assessment questionnaire developed specifically for CU.⁴ Recent CU treatment guidelines also refer to the use of these questionnaire sites as a tool for measuring disease activity and the quality of life of CU patients.⁵

In this issue of the *Allergy, Asthma & Immunology Research*, Lee *et al.*⁶ present a health-related utility of EuroQol 5-dimensional questionnaire (EQ-5D) in Korean CU patients. EQ-5D is not a CU-specified questionnaire, but its usefulness is known for many diseases with a well-known preference-based instrument for assessing health status.⁷ The components are about mobility, self-care, daily activity, pain/discomfort and anxiety/depression for 5 questions, and each question is evaluated on a 5-point scale. Eventually, research will get a single utility scale between 0 (death)–1 (full health). It can be the result of evaluating the effects of CU on overall health, not the degree of disease activity or symptom control.

Lee *et al.*⁶ reported a health-related quality of life index of 0.86 (as utility scale) for Korean adult CU patients assessed for EQ-5D. Looking further at the results, the quality of life index varied according to the degree of urticaria symptom control. Based on a UCT score of 12, a significant difference was found between 0.92 for controlled patients and 0.81 for uncontrolled patients. The results of each subdomain of EQ-5D show the difference of all

subdomains except self-care. The proportion of patients who concern the limitation of daily activity, inconvenience of daily life, and depressive feeling is higher in the uncontrolled group than in controlled group. The utility scale of uncontrolled patients was measured at 0.77 when the patients were divided into 3 groups based on the physician's judgment of urticarial symptom control. Compared to atopic dermatitis (AD), which is a cutaneous allergic disease, this utility scales were 0.88 ± 0.16 in mild AD and 0.70 ± 0.26 in moderate-to-severe AD, similar to the results in our study for health outcomes in CU patients (0.91 ± 0.1 for mild CU, 0.75 ± 0.2 for severe CU).

There are many studies of quality of life measured with EQ-5D in patients with other medical illnesses. The utility scale was 0.597 for patients who were undergoing dialysis.⁸ In a report that collected and analyzed studies assessing quality of life in heart disease, the utility scale of heart failure patients varied between 0.5 and 0.8, depending on the initial status. In the case of ischemic heart disease patients, it was measured at 0.45–0.8, depending on the disease status.⁹ In the case of type 2 diabetes, the most common chronic disease in Korea, a Japanese study demonstrated a utility scale of 0.86,¹⁰ and a Chinese study that studied patients with hypertension measured the index at 0.92.¹¹ It will be necessary to make comparisons in demographic and cultural aspects. However, based on the results of this study by Lee *et al.*,⁶ CU, rather than hypertension or diabetes, has a considerable impact on quality of life.

In this study, Lee *et al.*⁶ used conditional process analysis to create and evaluate a predict utility model for the effects of UAS7 and UCT results of CU patients on EQ-5D utility scale, but the total effects model showed a 38.28% change in the EQ-5D utility scale. Therefore, the EQ-5D utility scale in CU patients had a significant association with symptom control status and disease activity. Finally, this study will be helpful in measuring quality-adjusted health status in patients with active CU.

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