

IN THIS ISSUE...

Assessment of Pruritus

Pruritus affects millions of people worldwide, both as the most frequent symptom of dermatoses and a symptom in various other diseases, e.g. systemic, neurological and psychiatric, and as chronic pruritus of unknown aetiology. A recent study showed a high burden of chronic pruritus in the general population (1). Despite it being a common complaint, there are few studies regarding the evaluation and measurement of pruritus. So far, there is no robust and validated assessment tool to measure chronic pruritus and to monitor, for example, the response to pruritus treatment. This also hampers the comparability of studies. The assessment of pruritus and its associated affects is an important part of managing pruritus in daily clinical practice. A useful clinical approach for patients with chronic pruritus is the clinical classification of itch by the International Forum on the Study of Itch (IFSI) published by Ständer et al. in 2007 (2). In 2009, IFSI established a special interest group (SIG) for the evaluation and harmonization of measurement tools for clinical trials. Their first 2 studies are published in this issue. Meanwhile, IFSI started another SIG on “Itch questionnaires” in 2011.

Chronic pruritus is a subjective and multi-dimensional sensation that is difficult to measure. Assessment of chronic pruritus can be performed by, for example, documentation of the quantity and quality of pruritus using various scales and questionnaires, as well as of associated sensations and location, assessment of scratching, secondary skin changes and quality of life, but no single item provides a complete and safe assessment. One of the best options seems to be self-report of pruritus by the patient. By investigating several assessment tools for self-report of pruritus, such as visual analogue scale (VAS), numerical rating scale (NRS) and verbal rating scale (VRS), the group of authors has significantly contributed to increased knowledge about this difficult topic. It was a wise decision to use the VAS because this scale has already been used widely in other research fields, e.g. pain research, and in pruritus research during recent years. This instrument had not been evaluated in pruritus patients, but this has now been performed successfully. In a first study by Phan et al. (3), 3 pruritus intensity scales, the VAS, the NRS and the VRS, were investigated in 471 randomly selected patients with chronic pruritus. Patients were asked to assess pruritus during the last 24 h. High reliability and congruent validity were found for VAS, NRS and VRS. In a re-test, higher correlation and fewer missing values were observed. The mean values of all scales showed a high correlation. The data presented by Phan et al. (3) show a high discrimination sensitivity of VAS and

NRS values. However, a tendency to the middle of the VAS and NRS scales can be observed in the category “moderate pruritus”, and the authors speculate about the role of ethnic characteristics concerning experience and itch intensity. This requires further evaluation. There were no differences in monitoring pruritus intensity related to age, gender, or clinical patient group, except for the observation that men tended to rate itch intensity slightly higher than women. The authors conclude with the recommendations to use more than one scale, or a combination of different scales, to evaluate pruritus intensity, and to conduct a training session for using the VAS before starting a clinical trial.

As a conclusion of the study by Phan et al. (3), Reich et al. (4) investigated 310 patients (148 Caucasian and 162 Asian subjects) with various dermatological diseases. In this study, VAS scoring was defined as mild, moderate, severe and very severe pruritus. Pruritus intensity was assessed using the horizontal and vertical VAS, the NRS and the VRS. All scales showed very good reproducibility. No significant differences were found between the horizontal and vertical scales. VRS showed the highest correlation with NRS, followed by horizontal and vertical VAS. Patients rated their pruritus significantly higher when using NRS than when using VAS. The VAS was shown to be a valuable method of pruritus assessment. Differences between Caucasian and Asian subjects were observed (Caucasians scored pruritus significantly higher than Asians). The limitation of the study of Reich et al. (4) is the fact that such cut-off values could defer depending on ethnic descent. In addition, 35.2% of the Asian patients had atopic dermatitis (Caucasian 12.8%), a fact that may have influenced the results of the study as well as differences in age (Caucasians were significantly older than Asians) and 57% of the patients having taken anti-pruritic drugs. Moreover, the categorization of VAS was based on VRS because both scales are subjective. The authors conclude that VAS seems to be a valuable method of pruritus assessment. These 2 studies also illustrate that more work and clinical studies are required to determine, for example, the responsiveness of VRS and other methods of pruritus assessment.

Both publications clearly show that the authors were able to handle the difficult subject of pruritus assessment well, but they also highlight the limitations of their research and the complexity of the material. However, it must be considered as a great achievement of the authors to have adapted this approach and, in 2 very complex studies, applied it to the subject. Regarding the high level of complexity of the subject, this must be seen as an excellent accomplishment. As *Acta Dermato-Venereologica* is the official journal of IFSI, the publication of these 2 studies in this journal is welcomed and highly appreciated.

REFERENCES

1. Matteredne U, Apfelbacher CJ, Loerbroks A, Schwarzer T, Büttner M, Ofenloch R, et al. Prevalence, correlates and characteristics of chronic pruritus: a population-based cross-sectional study. *Acta Derm Venereol* 2011; 91: 674–679.
2. Ständer S, Weisshaar E, Mettang T, Szepietowski JC, Carstens E, Ikoma A, et al. Clinical classification of itch: a position paper of the International Forum for the Study of Itch. *Acta Derm Venereol* 2007; 87: 291–294.
3. Phan NQ, Blome C, Fritz F, Gerss J, Reich A, Ebata T, et al. Assessment of pruritus intensity: prospective study on validity and reliability of the visual analogue scale, numerical rating scale and verbal rating scale in 471 patients with chronic pruritus. *Acta Derm Venereol* 2012; 92: 502–507.
4. Reich A, Heisig M, Phan NQ, Taneda K, Takamori K, Takeuchi S, et al. Visual analogue scale: evaluation of the instrument for the assessment of pruritus. *Acta Derm Venereol* 2012; 92: 497–501.

Elke Weisshaar
Section Editor