Patients' Visual Analogue Scale: A Useful Method for Assessing Psoriasis Severity

Flytstrom, Ingela; Stenberg, Berndt; Svensson, Åke; Bergbrant, Ing-Marie

Published in:
Acta Dermato-Venereologica

DOI:
10.2340/00015555-1237

2012

Link to publication

Citation for published version (APA):

Total number of authors:
4

General rights
Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.
• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.
Patients’ Visual Analogue Scale: A Useful Method for Assessing Psoriasis Severity

Ingela Flytström1, Berndt Stenberg2, Åke Svensson1 and Ing-Marie Bergrant1
Departments of Dermatology and Venereology, 1Sahlgrenska University Hospital, SE-413 45 Göteborg and 2Umeå University Hospital, Umeå, and 3Department of Dermatology, Malmö University Hospital, Malmö, Sweden. E-mail: ingela.flytstrom@vgregion.se
Accepted July 13, 2011.

The quality of life of patients with psoriasis can be severely diminished. The disease often affects life at a physical, social and emotional level (1). In clinical studies, a wide variety of assessment tools is used to evaluate the severity of psoriasis, but there is a lack of standardization (2). The introduction of quality of life (QoL) instruments has improved psoriasis evaluation, but there is a need for consensus in order to make valid comparisons between studies (3). The Psoriasis Area and Severity Index (PASI) is the most commonly used method to describe severity of psoriasis, and the Dermatology Life Quality Index (DLQI) is the most common method for measuring QoL in randomized controlled trials (4). The visual analogue scale (VAS) is an often-used tool to measure subjective phenomena, which has shown good reliability and validity in terms of assessment of pain (5).

The aim of this study was to compare the simple VAS instrument with the most-used instruments for measuring psoriasis severity and QoL.

PATIENTS AND METHODS

Data from 68 patients with moderate-to-severe plaque psoriasis who participated in a 12-week randomized controlled trial comparing methotrexate and cyclosporin treatment effectiveness, QoL and side-effects, were used (6).

The PASI and patient VAS were used at baseline and at monthly intervals thereafter and the DLQI was used at baseline and after 8 and 12 weeks. The PASI was performed by blinded experienced assessors who had participated in a training course in assessment of the PASI prior to the study. The 100-mm VAS (ranging from zero (no complaints) to 100 (worst complaints)) was used for patients’ assessment of psoriasis activity at each visit. The statistical method used was the Spearman’s rank correlation coefficient test, non-parametric statistics.

Fig. 1. (a) Linear correlation between the visual analogue scale (VAS) and the Dermatology Life Quality Index (DLQI) at baseline ($r=0.39$, $p=0.0011$), week 8 ($r=0.31$, $p=0.0111$) and week 12 ($r=0.55$, $p<0.0001$). (b) Linear correlation between the VAS and the Psoriasis Area and Severity Index (PASI) at baseline ($r=0.18$, $p=0.1310$), week 4 ($r=0.40$, $p=0.0007$; not shown in figure), week 8 ($r=0.57$, $p<0.0001$) and week 12 ($r=0.69$, $p<0.0001$).
RESULTS AND DISCUSSION

There was a significant but modest correlation between the VAS and the DLQI at each visit (Fig. 1a), and also between the VAS and the PASI except at the baseline visit (Fig. 1b). A possible explanation for the lack of correlation at the baseline visit could be that some patients with lower PASI scores might still experience a major impact on QoL. Correlation, expressed as a percentage change from baseline to week 12, was found between the VAS and the PASI (Fig. 2a) and between the VAS and the DLQI (Fig. 2b). We suggest the VAS instrument should be used as a complement to the PASI and DLQI or as a single tool for assessing disease activity and QoL. The main advantage is that it takes only a few seconds to obtain a score, and imposes no inconvenience (7). One negative aspect might be the need for abstract thinking, which can make it difficult to understand and complete for some patient groups (8). Although further studies are needed to examine test-retest reliability and validity of the VAS in psoriasis assessment, we suggest that the VAS could be used for all psoriasis patients in everyday clinical practice.

The authors declare no conflict of interest.

REFERENCES