New Aspects of Itch Pathophysiology: Component Analysis of Atopic Itch Using the "Eppendorf Itch Questionnaire"

Abstract:

Itch represents a leading symptom in dermatological practice with many psychophysiological aspects. Instruments for qualitative registration of these central nervous factors and evaluation of therapeutic measures are still missing. We analyzed in detail the subjective itch sensation in 108 patients with acute atopic eczema with a new questionnaire developed in analogy to the McGill pain questionnaire. The descriptors with the highest load in atopic itch and the most frequent reaction patterns in atopic eczema patients were identified. Itch intensity (mean VAS 62%) and eczema severity (SCORAD mean 41 points) showed a different frequency distribution pattern with a correlation of \( r = 0.33 \) (\( p < 0.05 \)). Principal component analysis of the itch questionnaire data was performed and compared with the standardized SCORAD severity index for the patients with atopic eczema. Three main factors of atopic itch explained 58% of the total variance: (1) ‘suffering’ (correlation with SCORAD, \( r = 0.6 \)); (2) ‘phasic intensity’ (correlation with SCORAD, \( r = 0.4 \)), and (3) ‘ecstatic’ component (associated with certain active reaction patterns). In conclusion, the complete description of itch has to consider different factors, which may be described on a more general level by three main components. Two of these are correlated with objective criteria of disease activity.

Stichworte:

Itch; Pruritus; Atopic eczema; Multidimensional questionnaire;