28 February 2019. Commentary for BJD.
Words = 563

Why use an allergy-based quality of life measure in childhood atopic eczema?

Atopic dermatitis (AD) does not exist in an isolated dermatological vacuum. Many patients have other allergic diseases as they march through their atopic destiny: for example, 60% of children with severe AD may develop asthma[1]. The summed impact of these co-existing conditions is what is of relevance to the patient (and their family), not the skin effects alone. To ensure a holistic assessment of our AD patients, should we use a broad-based questionnaire?

The Paediatric Allergic Disease Quality of Life Questionnaire (PADQLQ) items were based on interviews with children with allergic asthma, rhino-conjunctivitis and/or eczema[2]. Its questions range over effects on the eyes, ears, nose, lungs, emotions and everyday activities, and also the skin. Validation was undertaken in children with systemic manifestations of grass pollen allergy, seasonal allergic rhino-conjunctivitis, asthma and/or eczema. And all subjects had to have symptoms that developed during the pollen season and positive results for a skin prick test to grass pollens. Of the 25 questions, only 14 seem to be relevant to many children with atopic eczema. Remarkably, in view of these restricted origins, Hon et al in this issue[3] have demonstrated good validation characteristics of PADQLQ in their AD patients.

As might be expected, PADQLQ correlated better with another quality of life (QoL) measure, the Children's Dermatology Life Quality Index (CDLQI)[4], than with the symptom/sign measures Patient Oriented Eczema Measure (POEM) and Nottingham Eczema Severity Score (NESS). One issue, important for many children, is that in contrast with CDLQI, PADQLQ does not contain items on bullying[5]. However, it is reassuring that the PADQLQ scores in the domains "practical", "emotional" and "symptoms" were greater in the severe AD patients than in "mild-moderate" AD patients[3].

Ways to measure dermatology-specific health-related QoL have mushroomed dramatically[6] since the first childhood specific measure in 1995[4]. The major secondary burden of skin disease on families can now also be assessed[7].

Although Razny suggested that there are already too many QoL measures available for use in AD[8], PADQLQ does contribute a new specific perspective, as it extends the usual classification of QoL measures. It is neither a generic (all diseases) measure, disease specific, nor a specialty specific measure. Rather it is a "cross-over" measure, covering allergic diseases. Perhaps one could envisage other hypothetical cross-over measures such as for "autoimmune disease", or "drug reactions".

But what of practical issues in using PADQLQ? According to Hon et al[3] completion of the 25 questions takes "less than ten minutes", compared to two minutes to complete the 10 question CDLQI[9], an important consideration if a QoL measure is to be used in routine busy clinical practice. Although score description bandings are available to give meaning to CDLQI scores, they do not exist for PADQLQ scores, limiting its clinical usefulness.

Why is this relevant to dermatologists who look after children with AD? The management of such children should consider their co-existing conditions, and some therapies may benefit more than one atopic condition. Some clinicians may not be aware of the extent of the combined impact of co-existing allergic disease on their patients.

Hon et al[3] have demonstrated "reasonably good agreement" between PADQLQ and CDLQI, begging the question as to why another measure may be helpful. However, their work on PADQLQ encourages us to view AD within a wider perspective and the measure may be useful in clinical research. But its value in routine dermatology practice remains at present untested.

L Manolache
*A Y Finlay

Dali Medical, Dermatology, Bucharest, Romania
ORCID: 0000-0003-2357-4229
*Institute of Infection and Immunity, Cardiff University School of Medicine, Cardiff, UK
ORCID: 0000-0003-2143-1646

Conflicts of interest

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