The Difficult Task of Assessing Psoriatic Arthritis

Psoriatic arthritis (PsA) is a systemic inflammatory condition characterized by musculoskeletal involvement associated with cutaneous psoriasis. The PsA clinical picture is generally dominated by peripheral arthritis with or without inflammatory spinal disease, as well as enthesitis and dactylitis¹. Extraarticular features belonging to the spectrum of spondyloarthropathies are also frequently observed, such as uveitis and gut inflammation². PsA's heterogeneous clinical spectrum is reflected in its complex pathogenesis, where genes and environmental triggers interfere with the innate and acquired immune system^{3,4,5,6}. On this basis, it is not surprising that the definition of the key domains and instruments for the evaluation of PsA has been, and remains, challenging.

The present classification of domains is based on the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) & Outcome Measures in Rheumatology (OMERACT) initiative, which proposed a framework for the long list of possible domains^{7,8}. Three categories of domains of interest were considered: "inner core," "outer core," and "research agenda." The domains included in the inner core were suggested to be employed in the assessment of patients recruited in all randomized controlled trials (RCT); other relevant domains recommended were listed in the outer core. An additional group of domains requiring further investigations was considered in a third circle as a research agenda. In summary, peripheral joint activity, skin activity, pain, patient global assessment (PGA), physical function, and health related quality of life (HRQOL) were included in the core set. Spinal disease, enthesitis, dactylitis, nail disease, fatigue, physician global assessment, radiography, and acute phase reactants were included in the middle core set. Imaging techniques such as magnetic resonance imaging (MRI) and ultrasound of joints and entheses, tissue analysis, and participation were included in the third set of domains⁸. The extensive research work performed in the last 10 years suggests that it was time to

revise the existing PsA core set, providing the opportunity to increase patient involvement in domain and instrument selection. Revision of the core set would also allow to reconsider the priorities in the selection of domains, such as participation (both work and leisure activities) that was not initially included in the core set^{9,10}. Domains such as PGA, pain, physical function, and HRQOL still deserve to be included in the core set, with the suggestion arising from patient representatives to add fatigue, which has also been ranked at a high level in the EULAR PsAID study¹¹. It has also been suggested to include domains dactylitis and enthesitis (currently in the second circle) in the core set, because of their great clinical importance in PsA and following the development of new assessment instruments.

The increasing importance of patients in these processes and the relevance of the patient perspective in the development and validation of patient-reported outcomes (PRO)¹² is reflected in the article of Lubrano, *et al*, published in this issue of *The Journal*¹³. The authors acknowledge that complex and clinically heterogeneous diseases, such as PsA, are difficult to summarize in all their aspects using PGA instruments or any single instrument¹⁴; nevertheless, in their study they demonstrated that PGA can also estimate low disease activity status and could be considered a surrogate for outcome measures for the assessment of global disease in patients with PsA during routine clinical practice. Shown to be a rapid and reliable tool, this instrument has demonstrated a strong correlation with minimal disease activity (MDA)¹⁵, although with limitations as explained by the authors in the Discussion¹³.

In order to update the successful "first edition" of the GRAPPA & OMERACT core set, consensus must be reached both on which domains to include, as well as on the selection of the most suitable instruments. A framework is clearly needed to embrace the whole spectrum of disease. The proposed new framework includes 4 core "areas": death, life impact (i.e., how disease affects patient life, patient

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feelings and function), resource use (all costs caused by the disease), and pathophysiologic manifestations (disease-specific signs and symptoms, biomarkers and potential surrogate outcome measures)¹⁶. According to the updated OMERACT Filter 2.0.¹⁷, all assessment core sets (including the PsA core set) should contain at least 1 measurement instrument from the 3 core areas death, life impact, and pathophysiological manifestations; it is also recommended to include 1 measurement from the area resource use¹⁸.

In conclusion, although to many rheumatologists it may appear logical and practical to embrace all PsA clinical domains in a composite disease activity and responder index summarizing the heterogeneous manifestations of PsA¹⁷, this approach remains controversial. In this regard, even patient or physician global scores are not comprehensive or complete enough to encompass assessment of all the clinical domains, such as joints (peripheral and axial), skin, enthesitis, and dactylitis.

For all the above reasons, the need for detailed information on specific domains appears strong and therefore should be obtained by means of several domain-specific instruments, not only in RCT but also in routine clinical practice.

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