New Paradigms in the Diagnosis and Classification of the Spondylarthritides

Nuevos paradigmas en el diagnóstico y la clasificación de las espondiloartritis

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Important advances in the understanding of spondyloarthritides (SAs) have been made in the area of classification criteria and have significantly improved the approach to these diseases and the better identification of patients in early stages of the disease. Conceptually, the term spondylarthritides (SA) continues to represent a heterogeneous group of interrelated diseases called ‘spondyloarthritides’ (SA), although often used in the plural form, “spondyloarthritides (SA)”, accentuating the sense of group, rather than a disease with different clinical presentations.

In the medical sciences in general and in rheumatology in particular, systems of diagnostic criteria or classification are used interchangeably for research and for clinical practice. However, the differences between them are substantial and must be known before application. The diagnostic criteria should be applied to individual patients and should be especially sensitive (high sensitivity) to allow identification of patients with the disease even during the early stages. This depends on the prevalence of the disease. In contrast, the purpose of the classification criteria is to differentiate patients with a specific disease from patients with other illness or individuals from the general population, and are used in epidemiological research to create homogeneous groups of patients. These criteria should have high specificity and be applied to patients’ already diagnosed. Their qualities are not dependent on the prevalence and should not be applied “automatically” for diagnosis, especially in populations where the prevalence is low, as in general practices, where the prevalence of these is low and high for low back pain of mechanical origin.

In the field of SA, two systems of criteria were developed almost simultaneously, the Amor and the European Group for the Study of Spondyloarthopathies criteria (EGSS), which have been very useful thanks to their good quality in terms of sensitivity (90.8% Amor and 83.5% EGSS) and specificity (96.2% Amor and 95.2% EGSS). However, the introduction of diagnostic imaging, especially MRI, which can detect early sacroiliitis, the efficacy of biological drugs in early stages of the disease and the need to recognize patients at increasingly early stages evidenced the shortcomings of these criteria for the early recognition (preradiologic) of inflammatory involvement of the sacroiliac joints and there was a need to develop a new system of classification criteria that overcame these limitations, namely ASAS. Previously, it was necessary to redefine some concepts. First, it issued a new definition of inflammatory back pain. Secondly, ASAS has proposed dividing patients with SA into 2 subgroups according to the clinical presentation: predominantly axial SA (which would include the SA and initial forms, now called non-radiographic axial SA) and predominantly peripheral SA (including reactive arthritis, psoriatic arthritis, arthritis associated with chronic inflammatory bowel disease and SAAx).

And thirdly, it coined the term “preradiographic axial spondylarthropathy” or “non radiographic axial spondylarthritides (SAax/pRx)” for patients with clinically predominantly axial disease where no structural damage is detected radiographically on the sacroiliac joints and hence could not be diagnosed with SA; although clinically indistinguishable, both (SAax/pRx and SA) represent a unique disease in varying stages.

With these premises, ASAS has developed and validated new criteria to classify patients according to their clinical expression (axial or peripheral), in the axial subtype, a patient may qualify for prediagnosis or reactive arthritis, psoriatic arthritis, arthritis associated with chronic inflammatory bowel disease and SAAx. In the field of SA, two systems of criteria were developed almost simultaneously, the Amor and the European Group for the Study of Spondyloarthopathies criteria (EGSS), which have been very useful thanks to their good quality in terms of sensitivity (90.8% Amor and 83.5% EGSS) and specificity (96.2% Amor and 95.2% EGSS). However, the introduction of diagnostic imaging, especially MRI, which can detect early sacroiliitis, the efficacy of biological drugs in early stages of the disease and the need to recognize patients at increasingly early stages evidenced the shortcomings of these criteria for the early recognition (preradiologic) of inflammatory involvement of the sacroiliac joints and there was a need to develop a new system of classification criteria that overcame these limitations, namely ASAS. Previously, it was necessary to redefine some concepts. First, it issued a new definition of inflammatory back pain. Secondly, ASAS has proposed dividing patients with SA into 2 subgroups according to the clinical presentation: predominantly axial SA (which would include the SA and initial forms, now called non-radiographic axial SA) and predominantly peripheral SA (including reactive arthritis, psoriatic arthritis, arthritis associated with chronic inflammatory bowel disease and SAAx).

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highlighted the differences in access to MRI in different countries, which may influence the applicability of the criteria in clinical practice.

ASAS criteria were developed as classification criteria, but, if applied in a scenario in which the prevalence of disease is high (rheumatology clinic seeing patients with suspected SA) they may also be used as diagnostic criteria. In other scenarios, such as in general medicine they are not sufficient enough to be used for diagnosis.

In short, the new ASAS criteria represent a step forward in the goal of better classification of patients with axial and peripheral SA than those previously developed, especially in the early stages of the disease. Another potential target of these criteria is to facilitate the conduct of clinical trials and observational studies in patients with axial preradiographic SA, but probably the most important contribution of these criteria is that they expand the range of therapeutic indications, via the authorization of competent agencies such as the European Drug Agency and the Food and Drug Administration with TNF blocking agents in patients with very early forms of the disease and lead us to finally confirm (or not) that the forceful therapeutic approach to axial spondyloarthritis changes the course of the disease or even induces permanent remission.

References