

Radiographic axial spondyloarthritis versus ankylosing spondylitis

Sirs,

Braun *et al.* in their letter claim that in clinical practice there is no need to differentiate between a diagnosis of 'radiographic axial spondyloarthritis (axSpA)' and 'non-radiographic axSpA (nr-axSpA)' (1). Implicit in their reasoning is the view that nr-axSpA and AS represent one single entity, even though differences between the two entities have been reported, including gender, HLA-B27 status, burden of inflammation, clinical course, and response to anti-TNF treatment (2, 3). They had themselves previously reported differences with regards to gender and signs of inflammation, although the disease burden did not differ (4). Moreover, since many of their patients without radiographic sacroiliitis at baseline had not progressed to develop sacroiliitis after years of symptoms, they had proposed that such patients be regarded as having nr-axSpA, rather than pre-radiographic AS (4). The gender and genetic differences between nr-axSpA and AS have been acknowledged in the recent joint SPARTAN/ASAS statement, but it was argued that these differences should be seen only as prognostic factors that define two subsets of the same disease, *i.e.* axSpA (5), even though a study from GESPIC cohort reported that male patients with nr-axSpA are significantly less likely to progress to radiographic sacroiliitis, and that such progression lacks a clear association with HLA-B27 (6).

Braun *et al.* concede that it may be necessary to make a formal differential diagnosis between nr-axSpA and AS when prescribing anti-TNF therapy. But that is indeed the key purpose of making a clinical diagnosis so as to ensure that the patient receives the most appropriate treatment. A diagnosis also serves other important functions, such as communication with other health care providers as well as with patients and their relatives. A diagnosis of AS portrays a much more

precise clinical picture than a diagnosis of axSpA.

In a strict sense, even the term 'radiographic axSpA' is not synonymous with 'AS'. For example, a patient with chronic back pain with onset before age 45 and radiographic sacroiliitis plus at least one SpA feature can be classified as radiographic axSpA by ASAS criteria, but not as AS according to the modified New York criteria, unless the patient's back pain is of inflammatory nature (improves with exercise and not relieved at rest) (7). Thus, in a recent Dutch cohort of patients with chronic back pain, 30 patients were classified as having radiographic axSpA, but 6 of them could not be classified as having AS (reviewed in ref. 3). Whether nr-axSpA and AS are overlapping but distinct entities or merely two subsets of the same disease can only be realised if these two entities are recorded with different labels, even under the same category of axSpA. Given the scarcity of data on the incidence and prevalence of nr-axSpA as well as on its disease course, its precise definition is crucial for expanding our limited knowledge. An unknown, but probably not an insignificant proportion of patients with nr-axSpA will never develop structural damage, even in the sacroiliac joints. Thus, for such patients a diagnostic label of axSpA, without excluding AS, is likely to add up to their worries and fears about future physical impairment and employability, the most prevalent quality of life concerns associated with AS (8). But it needs to be emphasised that classification criteria are developed to create a homogenous patient population to allow for comparison of patient populations across different studies (9). They are intended to be used at a group level, and their use in an individual patient in order to make a diagnosis is a misuse that runs the risk of misdiagnosis (10).

N. AKKOÇ¹

M.A. KHAN²

¹Dokuz Eylul University School of Medicine, Division of Rheumatology, Izmir, Turkey;

²Case Western Reserve University School of Medicine, Division of Rheumatology, MetroHealth Medical Center, Cleveland, Ohio, USA.

Address correspondence to:

Nurullah Akkoç,

Division of Rheumatology,

Dokuz Eylul University School of Medicine, 35340 Izmir, Turkey.

E-mail: nurullah.akkoc@gmail.com

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