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LETTER TO THE EDITOR

Comment to the article: Numerous factors hamper objective assessment of disease activity in axial spondyloarthritis

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We read your letter with interest and would like to respond to some points that need clarification.

First of all, we would like to recall that the study was based on the current imaging and disease activity scores of patients with axial spondyloarthritis (axSpA) diagnosed within Assessment of Spondyloarthritis International Society (ASAS) classification criteria. The study design was not based on newly diagnosed patients or retrospective data. Therefore, we did not include additional information regarding the identification of patient groups from the Human Leukocyte Antigen B27 (HLA-B27) arm and/or imaging arm at the time of diagnosis. Indeed, the literature reports that within 2-10 years, 10-40% of patients with nonradiographic axSpA may progress to radiographic axSpA.[1] Similarly, another study reported that bone marrow edema in the sacroiliac joint (SIJ) may change over the years in magnetic resonance imaging (MRI) follow-up of patients with axSpA.[2] In that study, the proportion of patients with the positive MRI definition of ASAS decreased from 29.3% to 22% at five-year MRI follow-up. Therefore, this study aimed to examine the correlation of current disease activity scores with the Spondyloarthritis Research Consortium of Canada (SPARCC) scoring system based on current MRI imaging rather than at the time of diagnosis.

We agree that the correlation coefficient is likely to be higher in HLA-B27-negative patients than in HLA-B27-positive patients. However, this criticism may be meaningful in cases where a significant correlation between disease activity scores and SPARCC scores in HLA-B27-positive patients has been reported and it has been argued that SPARCC scores may be important indicators of disease activity in HLA-B27-positive patients. In our study, only a correlation between the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), a disease activity score, and SPARCC scores was reported in HLA-B27-negative patients.

The percentage of patients using anti-tumor necrosis factor (TNF) agents in Table 2 was entered incorrectly during data transfer. In our study, 12.5% (n=4) of the patients were using anti-TNF agents. We have discussed the

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tendency of anti-TNF agents to improve MRI scores in SIJ in our discussion section.[3] On the other hand, although controversial, non-steroidal anti-inflammatory drugs may also decrease bone marrow edeme and SPARCC scores in SIJ.[4] Additionally, anti-TNF agents are known to be highly effective in improving disease activity scores, in addition to improving MRI scores.[5] From this perspective, we would like to point out that the type of drug may affect both poles of the correlation to different degrees.

In this study, correlation analysis of disease activity and SPARCC scores was included instead of a correlation analysis according to the type of drug used. Nevertheless, your contribution is valuable in terms of opening the door to new studies investigating differences according to the type of drug used.

In conclusion, there are many factors that may affect correlation analyses in axSpA patients. By eliminating these factors as much as possible, healthier results can be reported.

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