Axial spondyloarthritis in relatives of probands with Ankylosing Spondylitis.

Comment on the article by Turina et al

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To the Editor:

Turina et al (1) report a prospective inception cohort study of 51 seemingly healthy first-degree relatives (aged 18-40 years) of 36 HLA-B27 positive probands with ankylosing spondylitis (AS). Seventeen of these 51 (33%) first-degree relatives had clinical and/or imaging abnormalities suggestive of spondyloarthritis (SpA). HLA-B27 was present in only 8 of these 17 (47%) relatives with SpA, not different from the 53% prevalence among the remaining 34 relatives without SpA. Moreover, they report that axial SpA by the ASAS classification criteria (2) was present in 5 of 26 (19%) HLA-B27 positive relatives and in 4 of 25 (16%) HLA-B27 negative relatives. This almost equal proportion contrasts sharply with the findings of an earlier publication with a somewhat similar title ("spondylitic disease without radiologic evidence of sacroiliitis in relatives of HLA-B27 positive ankylosing spondylitis patients") (3). Turina et al (1) overlooked to cite this very relevant paper that was published in this very esteemed journal 32 years ago, in which we reported strong association of HLA-B27 with "spondylitis disease without radiographic sacroiliitis" (now can be called non-radiographic axial spondyloarthritis, or pre-spondyloarthritis) among HLA-B27 positive, but not HLA-B27 negative first-degree relatives of HLA-B27 positive patients with AS (3). The findings of Turina et al (1) also contrast with what the authors state in their article: “Previous studies have shown that SpA mainly manifests in HLA-B27 positive first-degree relatives”.

How to explain this surprising finding of about equal proportions of axial SpA in HLA-B27 positive and HLA-B27 negative relatives? (1). Two possibilities come to mind. First, their pre-spondyloarthritis cohort contains clinical entities that do not progress to full-blown axial SpA/AS (by modified New York criteria (4)) in HLA-B27 negative first-degree relatives, implying that the current ASAS classification criteria for axial SpA seem to lack criterion validity because they do not show a strong biologic relationship with AS (5). A second explanation, in line with other findings, would be that current ASAS axial SpA criteria may pick up some ‘look-alike’ nonspecific back pain conditions and false-positively label them as axial SpA (5,6).

In an accompanying editorial, Sari and Haroon (7) have very nicely critiqued other aspects of the pre-spondyloarthritis cohort study by Turina et al (1), and have also pointed out factors needing consideration in data interpretation and future analysis of the cohort.

REFERENCES:


