Supraventricular arrhythmia risk in ankylosing spondylitis patients

Dear Editor,

Ankylosing spondylitis (AS) is associated with cardiovascular diseases, including conduction disturbances, and AS patients have a high probability of developing supraventricular arrhythmias. Aksoy et al. evaluated P wave dispersion (PD) and signal-averaged electrocardiogram for P wave duration (SAPWD) in a small group of AS patients by 24-hour ambulatory electrocardiogram and 12 lead standard electrocardiogram. They showed an increased PD and SAPWD in AS group, compared with sex and age-matches volunteers, especially in the subgroup with diagnosed arrhythmias, with a positive correlation to clinical severity assessed with BASDAI. PD is considered to reflect the discontinuous and inhomogeneous propagation of sinus impulses and the prolongation of atrial conduction time and it has been widely shown to be an independent risk factor for atrial fibrillation development in some clinical conditions\textsuperscript{2-7}. The authors performed all electrocardiograms (ECGs) measurements manually. To achieve greater precision, we believe that scanning and digitizing ECG signals from paper records in order to display them on a high-resolution computer screen is a feasible and accurate alternative method with acceptable intraobserver and interobserver errors. However, it should be noted that in other clinical scenarios P-wave parameters, other than P-wave dispersion, are risk predictors of supraventricular arrhythmias and notably of stroke. Specifically, we refer to P-wave duration $\geq 120$ ms – the hallmark of the interatrial block (IAB) – losing the opportunity to firstly report the prevalence of IAB in this population with high risk of atrial arrhythmias\textsuperscript{8,9}. We suggest authors to analyze the P-wave morphology in inferior leads for identifying the advanced form of IAB, which is a stronger electrocardiographic predictor of atrial fibrillation and embolic stroke than P-wave duration.

The population study underwent transthoracic echocardiography for cardiac function and left atrial diameter evaluation, and no systolic dysfunction or atrial enlargement were found in AS patients compared with control group; however no data about diastolic function or left atrial volume index were given. It might be interesting correlate electrocardiographic indexes to the echocardiographic parameters, to assess the atrial electromechanical delay\textsuperscript{10-12}, a strong independent predictor of atrial fibrillation and cardiovascular morbidity. This analysis might strengthen the data obtained in this interesting study.

Conflict of Interest
The Authors declare that they have no conflict of interests.

References


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