ASSOCIATIONS BETWEEN CARDIAC CONDUCTION AND DISEASE CHARACTERISTICS IN AXIAL SPONDYLOARTHRITIS

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Background: Cardiac conduction defects are well-documented in axial spondyloarthritides. However, historical literature (many from an era when axSpA was less well managed compared to modern day) include patients with advanced disease that may explain their high prevalence. Many recent studies reply on administrative codes that may under-report conduction defects. Thorough examination of ECG measurements and axSpA characteristics are scarce.

Objectives: To describe a range of cardiac conduction measurements in axSpA and their association with disease characteristics.

Methods: We conducted a single-centre cross-sectional study of consecutive patients meeting the ASAS axial SpA criteria in Liverpool, UK. Patients were excluded if they had a known/symptomatic conduction defect. Disease assessment included BASDAI, spinal pain, BASFI, CRP, ESR, HLA-B27, BMI, the presence of extra-articular manifestations (uveitis, psoriasis, IBD) and use of NSAIDs and TNFi. Each patient underwent a 12-lead ECG (GE healthcare; MAC2000) to obtain: PR (atrio-ventricular conduction), QRS (ventricular depolarization) and QTc (ventricular de- and repolarization) intervals in milliseconds (ms). QTc was corrected for heart rate using Bazett’s formula. Prolonged PR interval was defined as >200ms, prolonged QRS as >100ms and prolonged QTc as >440ms in men and >460ms in women. QT dispersion has been shown to predict a range of cardiac outcomes; we measured this as the difference between the longest and shortest QT in two consecutive cardiac cycles. Associations between patient characteristics and ECG measurements were assessed using univariable linear or logistic regression. Bonferroni correction was applied for multiple comparisons.

Results: 163 patients underwent ECG testing: mean age 52 (SD14) years, mean symptom duration 10 years (SD 9.6), 79% male and 74% HLA-B27 positive (among 78 tested). 1 patient had Wolf-Parkinson-White (accessory pathway).

Summary of the 4 measurements are shown in Table 1. None of these 4 ECG measures were associated with age, symptom duration, gender, BMI, disease severity (BASDAI, spinal pain, BASFI and log transformed CRP/ESR), HLA-B27, EAMs or NSAIDs/TNFi.

Conclusion: Conduction defects were rare in this group of axSpA patients. Only 3% had prolonged AV conduction, which is no higher than general population estimates [1]. The prognostic value of these conduction defects and QT dispersion requires further study.

References:

Table 1. ECG measurements in 163 axSpA patients.

<table>
<thead>
<tr>
<th>Measure (SD)</th>
<th>n (%)</th>
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<tbody>
<tr>
<td>PR, ms</td>
<td>149 (24)</td>
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<tr>
<td>QRS, ms</td>
<td>91 (15)</td>
</tr>
<tr>
<td>QTc, ms</td>
<td>385 (32)</td>
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<tr>
<td>QT dispersion, ms</td>
<td>43 (21)</td>
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</table>

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Psoriatic arthritis

IMPACT OF FIBROMYALGIA ON DISEASE ACTIVITY INDICES, HEALTH RELATED QUALITY OF LIFE AND FATIGUE IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: Psoriatic arthritis (PsA), causes inflammation in joints and enthesopathy, emotional instability and poor quality of life (QOL). Fibromyalgia (FM) may coexist with PsA, complicating its diagnosis and management. The effect of FM on the QOL and fatigue in PsA patients has not been vastly studied. The objectives: Assess the effect of FM on PsA patients’ disease activity indices, QOL and fatigue.

Methods: This study included Group I: 37 PsA only patients (61.7%), 48.38 ± 11.69 years and group II: 23 FM-PsA patients (38.3%), 50.78 ± 11.8 years, according to classification criteria for PsA and 2016 Revisions to 2010/2011 FM diagnostic criteria. Psoriasis area severity index (PASI), disease activity in PsA (DAPSA), composite PsA activity index (CPDAI), PsA QOL and multidimensional assessment of fatigue (MAF) were assessed in both groups. The severity and impact of FM was assessed in group II.

Results: Patients with FM-PsA had a statistically higher PsA disease activity in subjective measures only but not in objective measures. Table 1