Background: Despite the development the criteria for the diagnosis of axial spondyloarthritis (axSpA) the problem of late axSpA diagnostics is not resolved. The difficulties in the assessment of MRI sacroiliitis (SI) could be of the reasons of axSpA diagnostic delay.

Objectives: to evaluate the inconsistency in the assessment of sacroiliac joints MRI that was performed by a blinded and unblinded rheumatologists and a radiologists.

Methods: The assessment of 80 magnetic-resonance tomograms of sacroiliac joints (SIJ) was performed by 4 independent readers, one which was blinded to clinical data radiologist (BR), another radiologist was informed that the study was performed for axSpA (unblinded radiologist - UR), another 2 readers were blinded to diagnosis rheumatologists. One of the rheumatologists was trained in SIJ MRI (BTRh), another rheumatologist was not trained specially in MRI of SIJ (BURh). The study was carried out on the magnetic resonance tomography (GE Discovery MR750W 3.0T) in T1 and T2 STIR regimen. 65 MRI were performed in pts that fulfilled the ASAS criteria for the axSpA and history of active SI (bone marrow edema) on previous SIJ MRI. According CT of SIJ 25 (38.5%) of these pts had nr-axSpA, 22 (33.8%) had SI grade II / III, in 18 (27.7%) of the pts SI grade IV was detected. 15 MRI scans were performed in healthy volunteers who did not meet the ASAS 2009 criteria at the time of the study and had no CT changes in SIJ.

The number of detected by each reader cases of active SI as defined by ASAS changes in SIJ.

Results: There was found that there was inter-reader reliability between results of blinded and unblinded radiologists (73.8%) with statistical differences in the number of detected and undetected signs of SI (p<0.05). The inter-reader reliability scores between the unblinded rheumatologist and the radiologist were 97.5% and did not have statistically significant statistical differences (p<0.05).

For a trained rheumatologist and a blinded untreated rheumatologist it was 53.5% and had significant statistical differences (p<0.05).

The results of 4 readers SIJ MRI assessments are presented at Table 1.

Table 1. The results of MRI sacroiliac assessments performed by blinded and unblinded radiologists and rheumatologists

<table>
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<th>BR</th>
<th>UR</th>
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| Revealed SI in axSpA (n = 65), n(%) | 44 (67.7)
64 (98.5) | 62 (95.4) | 26 (40)
6 (9.5) |
| Undetected SI in axSpA (n = 65), n(15) | 21 (32.3) | 11 (1.5) | 3 (4.6) | 39 (60) |
| Revealed SI in controls (n = 15), n(%) | 2 (13.3) | 3 (20) | 3 (20) | 1 (6.7) |
| Undetected SI in controls (n = 15), n(15) | 13 (86.7) | 12 (80) | 12 (80) | 14 (93.3) |

*Inter-reader reliability with the results of all other reader with p<0.05.

Conclusion: The agreement in the assessment of MRI of SIJ assessment was detected between blinded radiologist and trained blind rheumatologist. Blinded radiologist had shown lower inter-reader agreement with another specialists. The lowest of all inter-reader agreement had shown untrained blinded rheumatologist. Special MRI of SI assessment trainings for rheumatologists and radiologists are unmet need for the improvement of in-time axSpA diagnostics.

Disclosure of Interests: None declared.

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AB0518  Atherosclerotic Risk in Patients with Ankylosing Spondylitis: Biomarkers versus Score

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Background: Chronic inflammatory rheumatic diseases are associated with a high cardiovascular risk. However, data in ankylosing spondylitis (AS) are still limited.

Objectives: The aim of our study was to assess the atherosclerotic risk in patients with AS, by comparing the Systemic coronary risk evaluation: SCORE, with biomarkers of atherosclerosis: High sensitivity C-reactive protein (Hs-CRP), LDL/HDL ratio and apolipoprotein A1 (Apo A) /apolipoprotein B (Apo B) ratio.

Methods: We conducted a cross-sectional observational study of 40 patients with AS, over a period of 3 months. Socio-demographic data, clinical characteristics of the disease, as well as biological, radiological and therapeutic data were collected for each patient. Coagulated blood samples were collected following a 12-hour fast. Cardiovascular risk was considered high for Hs-CRP>3.0 mg/mL [1], LDL/HDL> 3.5 in men and 3.0 in women [2], and ApoA/ApoB level>0.9 [3,4]. The SCORE was calculated for all patients.

Results: The mean age of our population was 44±10 years. Male predominance was noted with a sex ratio =11.1. The mean ASAS-CRP and BASDAI levels were 3.6±10.0 and 4.2±12.7 respectively. The mean age was 45.7±12.66 years. The mean age at the disease onset was 28.89 ± 12.54 years. The mean CRP was 33.38 ± 39.65 mg/dL. The mean ASASDI and ASDAS-CRP were 4.21 ± 2.23 and 3.06 ± 1.26, respectively. The mean BASFI was 4.77 ± 2.58.

Fifty-one of our patients were smokers (37%). They were 48 men and 3 women. The mean pack-year was 45 ± 17.15.

Conclusion: Our results reveal that smoking can be responsible of a younger axSpA onset, and can lead to more severe structural damages regardless the disease activity. This highlights the importance of smoking cessation in preventing early bone damage in axSpA.

Disclosure of Interests: None declared.

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