SAT0344

STRUCTURAL RADIOLOGICAL DAMAGE MSASSS SCORE: ASSOCIATION WITH THE PRESENCE OF SUBCLINICAL CAROTID ATHEROMATOSIS IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS

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Background: Axial spondyloarthropathies (SpA) are associated with an increase in cardiovascular morbidity and mortality, showing an increase of 20% to 40% in the risk of cardiovascular events compared to the general population and constituting the main cause of death. The presence of subclinical atheromatosis, in the form of carotid plaques, is more frequent in patients with SpA than in healthy controls. Axial structural radiological damage in SpA is a consequence of the inflammatory activity of the disease.

Objectives: To analyze whether axial radiological damage by mSASSS (Modified Stoke Ankylosing Spondylitis Spine Score) is related to cardiovascular risk factors or the presence of subclinical atheromatosis in patients with SpA.

Methods: 195 patients diagnosed with SpA according to ASAS criteria without previous history of cardiovascular events or diabetes were assessed. The clinical characteristics, cardiovascular comorbidity, risk profile by Systematic Coronary Risk Evaluation (SCORE) and axial radiological damage (mSASSS score) were analyzed. The presence of plaques and intima-media thickness (cIMT) was determined by carotid ultrasound. The relationship between mSASSS and subclinical atheromatosis was analyzed by multivariate regression analysis.

Results: 36% of patients with SpA showed presence of carotid plaque and a cIMT of 0.651 ± 0.121 mm. *log* mSASSS disclosed a positive univariate relationship with age (beta coefficient 0.07 [95% CI 0.06-0.08], $p = 0.000$) and classic cardiovascular risk factors such as abdominal waist, hypertension (0.73 [95% CI 0.31-1.16], $p = 0.001$), smoking (0.33 [IC95% 0.08-0.59], $p = 0.010$), SCORE (0.33 [IC95% 0.24-0.42], $p = 0.000$) and levels of C-reactive protein, glucose and C-peptide. Similarly mSASSS showed a positive relationship with the BASFI (0.18 [IC95% 0.11-0.26], $p = 0.000$) and BASMI (0.31 [IC95% 0.23-0.38], $p = 0.000$) scores, but not with ASDAS-CRP or BASDAI. The presence of carotid plaque (0.51 [95% CI 0.09-0.93], $p = 0.018$) and a higher cIMT (4.1 [IC95% 2.4-5.7], $p = 0.000$) were also significantly and positively related to a higher mSASSS. When these analyzes were performed in a multivariate phasion adjusting for age and sex, the relationships of *log* mSASSS with cardiovascular risk factors were lost, although the relationship of the former with BASFI, BASMI and SCORE remained statistically significant. With regard to subclinical atheromatosis, the relationship between *log* mSASSS and cIMT was not significant after the multivariate analysis; however, the presence of plaque showed an almost significant relationship after adjustment for age, sex and cardiovascular risk factors (0.34 [95% CI -0.42-0.73], $p=0.081$).

Conclusion: Axial radiological damage through mSASSS is independently related to cardiovascular risk SCORE. A tendency to an independently significant relationship with the presence of carotid plaque was observed.

Disclosure of Interests: None declared

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SAT0345

PREGNANCY RATES AND OUTCOMES IN EARLY AXIAL SPONDYLOARTHRITIS: ANALYSIS OF THE DESIR COHORT

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Background: Only scarce data is available on regarding pregnancy rates and pregnancy outcomes in early axial Spondyloarthritis (axSpA).

Objectives: a) to estimate the probability of achieving a clinical pregnancy over time and its associated factors in early axSpA, b) to estimate the probability of presenting an unfavorable pregnancy outcome over time and its associated factors in this population.

Methods: Observational prospective French cohort (DESIR) with 6y of follow-up, including 381 of TNFi-naïve women with early axSpA. Study visits were scheduled every 6 months in the first two years of follow up then yearly up to 6 years. Data on pregnancy were collected both retrospectively (before cohort inclusion) and prospectively (since inclusion) up to 6

years of follow up. Baseline characteristics of nulligravidae and uni/multi-gravidae patients where compared. The probability of achieving at least one pregnancy over time was estimated (Kaplan Meier). Associated factors were estimated by multivariable Frailty Shared Models and mixed models taking into account the correlation between several pregnancies from the same women. The probability to present an unfavorable pregnancy outcome over time (i.e. a miscarriage or pre-term delivery or an elective termination of pregnancy) was estimated only during the prospective period (Kaplan Meier) since associated factors were collected also prospectively. Associated factors to an unfavourable pregnancy outcome were estimated by multivariable Frailty Shared Models and mixed models.

Results: Of the 381 women included in the analysis, 276 (72.4%) and 105 (27.6%) women were respectively multigravidae and nulligravidae at the end of the 6y follow-up. Multigravidae women were significantly older (37.2 ± 8.0 vs 27.6 ± 7.1 , $p < 0.01$), less educated (56.7% vs 71.2% university studies, $p = 0.01$), reported higher fatigue levels (6.3 ± 2.1 vs 5.7 ± 2.4 , $p = 0.02$), higher BASDAI (4.9 ± 1.9 vs 4.4 ± 1.9 , $p = 0.03$), and higher BASFI (3.6 ± 2.4 vs 2.8 ± 2.2 , $p = 0.003$) scores at baseline. The probability to have at least one pregnancy throughout life was 61.8% [55.1-67.5]. The mean age at the first pregnancy was 27.3 years old.

One hundred and twenty-four pregnancies occurred during follow-up. The probability to have at least one clinical pregnancy during this period was 28.5% [0.2-0.3]. Lack of TNFi use in the 6 months preceding the pregnancy outcome (HR=2.0 [95%CI 1.1-3.3], $p = 0.01$) and a CRP ≥ 6 mg/L (HR=1.7[95%CI 1.2-2.5], $p = 0.01$) were found to be associated with a pregnancy over follow-up.

Among the 80 pregnancies occurring after inclusion with data available on the outcome, 60 (75%) presented a full-term delivery while 12 (15.0%) presented an unfavorable pregnancy outcome (6 (7.5%) and 6 (7.5%) had a miscarriage or a pre-term delivery, respectively), 2(2.5%) had a voluntary interruption of pregnancy and 6 (7.5%) were pregnancies still ongoing at the end of follow-up. Only NSAID use (HR=2.5[95%CI 1.1-5.0], $p = 0.02$) within 6 months of delivery were associated with an unfavorable outcome. TNFi use during pregnancy (6 patients) was not associated with an unfavorable outcome (HR=2[95%CI 0.8-5.0], $p = 0.10$).

Conclusion: More than 70% patients within this early axSpA had at least one pregnancy. A favorable pregnancy outcome (i.e. full-term delivery) was observed in 75% of patients, which is comparable to the general population data. Patients who achieved a pregnancy were more likely to have stopped their TNFi 6 months prior to the pregnancy outcome and increased their CRP, probably reflecting clinical practice from 10 years ago, when recommendation was to withdraw TNFi before pregnancy. NSAID use within 6 months of delivery was independently associated with an unfavorable pregnancy outcome, while TNFi use was not.

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SAT0346

EARLY RECOGNITION OF AXIAL SPONDYLOARTHRITIS IN PATIENTS WITH ACUTE ANTERIOR UVEITIS: COMPARISON OF TWO REFERRAL STRATEGIES

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Background: Diagnostic delay in axial spondyloarthritis (axSpA) remains with 5 to 9 years very high. Extraarticular manifestations like acute anterior uveitis might occur as first manifestations. Up to 40% of patients with acute anterior uveitis have an undiagnosed SpA. Recently, the Dublin Uveitis Evaluation tool (DUET) was proposed as a SpA screening