Doppler ultrasound (CDUS) for the detection of sacroiliitis in patients with nr-axSpA (AS), becoming a useful and practical tool in comparison with MRI. The value of sacroiliac US has been studied in patients with Ankylosing Spondylitis (AS), assisting in the diagnosis of spondyloarthritis (SpA). The diagnostic role to diagnose active sacroiliitis, so this technique is projected as a promising diagnostic tool for the diagnosis of nr-axSpA and AS.

**REFERENCES:**


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**HPR Abstract Session (II).**

**OP0257**

**VALUE OF COLOR DOPPLER ULTRASOUND ASSESSMENT OF SACROILIAC JOINTS IN NON-RADIOPHAGIC AXIAL SPONDYLOARTHITIS: A COMPARISON WITH ANKYLOSING Spondylitis**

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**Background:** Ultrasound (US) is an accessible imaging technique with a possible role to diagnose active spondylitis, so this technique is projected as a promising diagnostic tool for the diagnosis of spondyloarthritis (SpA). The diagnostic value of sacroiliac US has been studied in patients with Ankylosing Spondylitis (AS), becoming a useful and practical tool in comparison with MRI. There are scarce data on the utility of US in the evaluation of Non-radiographic Axial Spondyloarthrits (nr-axSpA).

**Objectives:** The aim of this study is to evaluate the diagnostic utility of color Doppler ultrasound (CDUS) for the detection of sacroiliitis in patients with nr-axSpA and AS.

**Methods:** Patients with nr-axSpA (n=114) and AS (n=60) were enrolled in the study with standardized clinical criteria. According to the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), nr-axSpA and AS patients were separately divided into active group (n=47, n=43) and inactive group (n=67, n=37). All patients underwent clinical evaluation, and CDUS of sacroiliac joints (SIJs) within the same week. Vascularization, the resistive index (RI) of the first foraminal ramus of the lateral sacral artery were observed and measured by a sonographer who is blinded to initial clinical and radiological assessments. The associated statistics and graphs was utilized to obtain the relationship, which were reflected by the Co-index receiver operating characteristic (ROC) curve or calculating the area under ROC curve (AUC), between the RI of the SIJs and the RI of the first foraminal ramus of the lateral sacral artery in nr-axSpA and AS by using the Logistic Regression analysis method, SPSS24.0 and MedCalc19.6 software. With MRI-proven sacroiliitis as the diagnostic standard, the kappa test were used to measure the consistency between the RI of the SIJs and MRI.

**Results:** t. The RI of the SIJs (AUC=0.855, P<0.001) and Co-index (AUC=0.886, P<0.001) were similar sufficient (Z=1.331, P=0.183) to distinguish the active and inactive group in nr-axSpA.2. The RI of the SIJs (AUC=0.869, P<0.001) and Co-index (AUC=0.893, P<0.001) were also similar sufficient (Z=1.292, P=0.196) to distinguish the active and inactive group in AS.3. Neither of the RI of the first foraminal ramus of the lateral sacral artery in nr-axSpA (AUC=0.748, P<0.001) and AS (AUC=0.674, P=0.003) was outstanding to distinguish the active and inactive group.4. The RI of the SIJs was similar sufficient (Z=0.267, P=0.790) to detect sacroiliitis in nr-axSpA and AS. The Co-index was also similar sufficient (Z=0.146, P=0.884) to detect sacroiliitis in nr-axSpA and AS.6. The RI of the SIJs in nr-axSpA and AS showed moderate consistency with MRI (the Kappa values were 0.534 and 0.609, respectively, P<0.01).

**Conclusion:** The RI of the SIJs is a possible role to diagnose active sacroiliitis, so CDUS is projected as a promising diagnostic tool for the diagnosis of nr-axSpA and AS in comparison with MRI.

**REFERENCES:**


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(88.3%), and cross-sectional (100%) in nature. In total there were 1281 patients, 47% (n = 605) were patients with primary SS and the remaining 53% (n = 676) were patients with secondary SS. Both patient groups were predominately comprised of females (n = 609: 99% and n = 673: 99.5%, respectively), with a combined mean age of 50.82 years (M ranges = 35 – 62.82 years). An amalgamation of results from 17 studies, found that women with SS who score higher on the ESSPRI scale (total score and the subdomains of pain, fatigue and dryness) were more likely to experience significantly greater levels of vaginal dryness, sexual dysfunction and sexual distress. Moreover, women with SS who present with clinical levels of anxiety or depression were also more likely to experience disruptions in their sexual functioning and appraise their sexual life more negatively. Furthermore, patients who report greater severity of oral or ocular dryness, or dyspareunia may experience vaginal dryness, which may have ramifications on sexual functioning. Women of all ages are at risk of experiencing sexual dysfunctions, however, younger women (≤50 years) may experience more burdensome disruptions than older women. Finally, women who do not use lubrication products during sexual activity may be impacted further.

Conclusion: Younger women (≤50) with SS who present with more severe symptoms of fatigue, pain, and oral or ocular dryness, or with clinical levels of anxiety or depression, may be at increased risk of experiencing sexual dysfunction and sexual distress. Healthcare professionals should be aware of these potential risk factors and initiate conversations around sexuality as and when appropriate.

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Results: There were 11,540 adults with at least two observations (including survey and mortality data) for the study period (1251 males, 6289 females). Life expectancy at age 50 was 29.7 years for men and 33.4 years for women. HWLE being 9.9 years (men) and 8.3 years (women). HWLE at age 50 for adults with osteoarthritis was 7.3 years (men: 8.2, women: 6.8), and for adults without osteoarthritis was higher at 9.9 years (men: 10.6, women: 9.1). After adjusting for age, the instantaneous risk of ceasing to be both healthy and in work (not due to death) for people with OA was 1.5 times that of people without OA (hazard rate ratio 1.5 with 95% CI [1.3, 1.6]). For adults without OA, HWLE at age 50 was 13.2 years if they felt they had control at work and 4.1 years without control at work, whilst for adults with OA, HWLE was 10.4 years if they felt they had control at work and 3.1 years without. The effect of mental health problems as a comorbidity on HWLE was smaller; for adults without OA, HWLE at age 50 was 11.0 years for those with mental health problems and 8.3 years for those with, whilst for adults with OA, HWLE was 8.6 years for those without mental health problems and 6.2 years with.

Conclusion: While the average HWLE for men and women in England is lower than the State Pension age, HWLE at age 50 is even lower (by approximately 25%) in adults with OA compared to adults without OA. Poor mental health further reduces HWLE. However, good quality work environments significantly lessen the impact of osteoarthritis (there is a 7.3 year difference in HWLE for those with OA who do and do not experience control at work). These results suggest that interventions and policies that create appropriate job opportunities and supportive workplaces for older workers with health conditions are key to the feasibility and success of extended working life policies.

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PREDICTORS OF WORK PARTICIPATION IN PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS AFTER 12 MONTHS OF T2T THERAPY INTERVENTION

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Background: Rheumatoid arthritis (RA) is associated with restrictions on work participation (WP) caused mainly by periods of sick leave (absenteeism), reduced productivity at work due to disease (presenteeism) and occupational disability, which account for a significant proportion of indirect costs.

Objectives: We investigate the predictors of WP after 12 months of Treat-to-Target (T2T) intervention.

Methods: Data were analyzed from the multi-center ERFASS study, which included patients with rheumatoid factor and/or ACPA positive RA after initiation or escalation of disease modifying anti rheumatic drug (DMARD) therapy following a T2T regimen prospectively over 12 months from 01/2018 to 12/2019. A total of 157 patients of working age (18 to 65 years) were included in this evaluation. Socio-demographic and occupational characteristics (WPSI, self-conducted work questionnaire), clinical parameters including disease activity (DAS28, RADAI), impact of disease (RAPP, Physical Health (PHD-9) and fatigue (VAS) were analyzed and logistic regression analysis to detect baseline predictors for unimpaired WP after 12 months was performed.

Results: The mean age of the patients was 52.9 years (standard deviation (SD): 8.19) and 117 (74.5%) were female. 51 patients (32.5%) started first line DMARDs and in 106 patients (67.5%) treatment was escalated. T2T resulted in a significant decrease in mean DAS28 from 4.2 (SD 1.10) at baseline to 2.5 (SD 1.11; p<0.001) after 12 months. 64.3% of the patients were in remission (DAS28<2.6) and 12.1% had low disease activity (DAS28 2.6-3.2). The proportion of patients with no impairment of WP increased significantly and presenteeism and absenteeism became significantly less prevalent, but the proportion mortality data from the National Health Service Central Register. HWLE was defined using two self-report variables; health was defined as no long-standing illness or no activity limitation if long-standing illness was present, and work was defined being in employment or self-employment. OA status was identified by self-report of ever receiving a diagnosis from a doctor. Mental health and control of work were measured by self-report. Continuous-time multistate models with three states (healthy and working [state 1], other alive [2], dead [3]) were fitted in R (version 3.6.1) to investigate factors driving transitions out of the healthy and working state. Models included age and combinations of sex, OA, control at work, and mental health problems. Age-adj usted hazards of transitions between states were estimated using the ‘mstate’ R package. HWLE for adults with different factors (OA, control of work, mental health) was estimated with the ‘elect’ R package using models fitted with ‘mstate’. Missing data was handled using multiple imputation by predictive mean matching.

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