superior to MR alone (75.6% / 97.3%) (see Figure). CT had the best interrater reliability (kappa = 0.875) followed by MR (0.665) and XR (0.517). CR+MR reliability was similar (0.662) compared to MR alone, while CT+MR reliability (0.732) was superior.

Figure 1. Frequency of positive and negative findings in radiography (XR), computed tomography (CT), magnetic resonance imaging (MR) and combinations and resulting diagnostic accuracy values. SE: Sensitivity, SP: Specificity, LR-/+: negative/positive likelihood ratio.

Conclusion: In conclusion, XR is inferior to cross-sectional imaging and should be replaced by MR or CT for differential diagnosis. While MR is the most sensitive imaging technique, it lacks specificity when compared to CT, whereas CT alone has high diagnostic accuracy, despite being insensitive to bone marrow lesions such as fatty metaplasia or ostelitis. Adding CT to MR leads to an increase in specificity at a minor expense of sensitivity.

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HPR Abstract Session (II.)

OP0258-HPR

IS THERE A SUBSET OF PATIENTS WITH SJÖGREN’S SYNDROME WHO ARE MORE AT RISK FOR SEXUAL DYSFUNCTION? RESULTS FROM A SCOPING REVIEW

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Background: Individuals with Sjögren’s syndrome (SS) experience significantly higher levels of sexual dysfunction and sexual distress than healthy controls (van Nirmwegen et al., 2015), identifying associated factors may help to identify a subgroup of patients with SS who may benefit from early intervention to maintain sexual wellbeing and avoid unnecessary sexual disruption.

Objectives: To explore and map the salient symptoms and factors that influence alterations in sexual functioning and intimate relationships for people with SS.

Methods: The protocol for this review was registered with the Open Science Framework prior to commencement of the searches. The peer-reviewed search strings were used to search the following databases from inception to June 2019: Cochrane Library, CINAHL (EBSCO), MEDLINE (ProQuest), PUBMED (MEDLINE), ScienceDirect, Scopus and Web of Science. Grey literature was searched for on academic databases, topic-specific repositories, and Google Scholar. Databases were searched using key terms corresponding to sexual functioning and intimate relationships. Studies were included if their participant sample was comprised of adults aged ≥18 years, with a diagnosis of primary or secondary SS. Studies were not excluded based on source type, methodology or design. To qualify for inclusion, studies needed to have been peer-reviewed and available in English. Retrieved articles were then screened against the inclusion/exclusion criteria by two reviewers. Hand-searching was conducted on the reference lists of included articles, as well as the three most prevalent publishing journals until saturation had been achieved.

Results: The search strategy returned 3527 unique citations. After screening processes were completed, only 19 articles met the inclusion criteria. Studies were predominately conducted in European countries (79%), within the last decade (88%; 2010-2019), and were mainly quantitative (n = 17; 89.5%), case-controlled.

OP0257

VALUE OF COLOR DOPPLER ULTRASOUND ASSESSMENT OF SACROILIAC JOINTS IN NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS: A COMPARISON WITH ANKYLOSING Spondylitis

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Background: Ultrasound (US) is an accessible imaging technique with a possible role to diagnose active sacroiliitis, 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 Spondyloarthritids (n-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 n-axSpA and AS.

Methods: Patients with n-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), n-axSpA and AS patients were separately divided into active group(n=47;43)and inactive group (n=67;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 n-axSpA and AS by using the Logistic Regression analysis methods,SPSS24.0 and MedCalc19.6.0 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=0.163) to distinguish the active and inactive group in n-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 n-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 n-axSpA and AS.S. The Co-index was also similar sufficient (Z=0.146, P=0.884) to detect sacroiliitis in n-axSpA and AS.6. The RI of the SIJs in n-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 n-axSpA and AS in comparison with MRI.

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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 (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 burden-some disruptions than older women. Finally, women who do not use lubrication products during sexual activity may be impacted further.

Conclusion: Younger women (≤50 years) may experience more burden-some disruptions than older women. Finally, women who do not use lubrication products during sexual activity may be impacted further.

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THE EFFECT OF OSTEOARTHRITIS ON HEALTHY WORKING LIFE EXPECTANCY AT Age 50 IN ENGLAND

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Background: Retirement ages are rising in many countries due to population ageing and increasing life expectancy. However, poor health, comorbidity and workplace factors are major reasons for work absence and it is unclear if people in later working-age life (age ≥50) are able to work for longer. Osteoarthritis (OA), the most common joint condition in adults, is the fastest increasing major health condition globally and is a leading cause of disability (especially in adults age ≥50).

Objectives: We aimed to estimate healthy working life expectancy (HWLE; defined as the average number of years that adults from age 50 can expect to be healthy and in paid work) for adults with and without osteoarthritis and investigate the role of mental health problems as a comorbidity and the role of workplace factors through examining whether there is a sense of having any control over what happens at work.

Methods: Longitudinal survey data of adults aged ≥50 years were used from six waves (2002-2013) of the English Longitudinal Study of Ageing with linked 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 as 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-adjusted 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.

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 with 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 without 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 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 APCA 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 (WPAI, self-conducted work disability index), HRQoL (SF-36), disease activity (DAS28), OA status (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...