and treatment, we found no influence of the TB screening method on the risk of LTBR. However, the TST2 and QTF groups had a significantly lower TB risk, with the TST1 group as reference, when all cases of active TB were analyzed: HR [95% CI] were 0.19 [0.04-0.94], p=0.041 for TST2 and 0.09 [0.01-0.74], p=0.025 for QTF, suggesting that the period of TNFi initiation, when the TB incidence in general population was higher than in the later years, determined a higher risk for active TB.

Conclusions: In a country with a high TB burden, where all arthritis patients started on TNFi were screened for latent TB, new TB infection exceeds LTBR. Baseline screening and prophylaxis was efficient in positive patients but it is not enough in preventing active TB on a long term and the screening protocol should be revised.

Disclosure of Interest: None declared

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SAT0331 CLINICAL AND ULTRASOUND PARAMETERS INFLUENCE THE VARIABILITY OF PATIENTS' AND PHYSICIANS' GLOBAL ASSESSMENT IN PSORIATIC ARTHRITIS

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Background: Treatment decisions in Psoriatic Arthritis (PsA) depend upon the perception of disease activity by rheumatologists and patients. The factors explaining the variability of disease activity assessments, however, are elusive so far.

Objectives: The purpose of this study was the identification of clinical and/or ultrasound parameters explaining the discrepancy between patients' (PGA) and evaluator's global assessment (EGA) of disease activity in PsA.

Methods: We performed a prospective study on 83 consecutive PsA patients with study visits at baseline and after 6 months. All patients underwent the following clinical assessments: tender (TJ) and swollen joint (SJ) counts (68/66 joint count), PASI, dactylitis score and the Leeds Enthesitis Score. We also recorded the PGA, patients' pain assessment (pain VAS), the EGA (all measured on a 100mm VAS) as well as the Dermatology Life Quality Index (DLQI) and the HAQ. Ultrasound was performed by an independent investigator blinded to clinical results using an ESAOTE MyLab Twice ultrasound device (6–18 MHz and 4-13 MHz probes). Structural (erosions, osteophytes) and inflammatory changes [gray scale (GS) and Power Dopper (PD)] were investigated at 68 joints and 14 entheses. For statistical analysis, we used SPSS v22. Multivariate regression models were performed to identify the possible association between clinical or ultrasound parameters with EGA and PGA.

Results: Mean age of patients was 51.8 (±11.7) years, 26.2% were female, 43.4% were treated with methotrexate and 37.3% received anti-TNF agents. Disease activity was differently evaluated by patients and physicians in 65% of cases: in 53% (n=44) of patients, PGA scores were higher than EGA and vice versa, 12% (n=10) of cases had higher EGA scores. EGA and painVAS correlated strongly in patients with high PD scores ($r=0.756$ ($p<0.001$) in cases with a PD score >10) whereas a weak association was observed in patients with low levels of ultrasound inflammation, ($r=0.376$, $p<0.05$). Besides, a good correlation between EGA and painVAS ($r=0.823$, $p<0.001$) was found in patients with a high erosion score (>10) whereas in patients with low levels of structural damage, the correlation was weak ($r=0.384$, $p<0.05$). The association between PGA and EGA was not linked with the degree of ultrasound verified inflammation or damage.

A multivariate regression model was conducted to identify clinical factors explaining the variability of PGA and EGA in PsA patients. Half of the variability of PGA results was explained by pain VAS (30.5%), swollen joints (15%) and tender joints (6.5%). Besides, pain VAS (B-coeff=0.534, $P<0.001$) and HAQ (B-coeff=6.266, $P<0.05$) were significant predictors of PGA. The variability of EGA results was mainly explained by the SJ count (48.5%), SJ also predicted EGA levels (B-coeff=3.098, $P<0.001$). In the ultrasound model half of the variability of PGA was explained by pain VAS (42.9%) and GSS-joints (4.7%) while the EGA results were clarified by GSS-joints (12.9%), HAQ-score (9.8%), pain VAS (9.1%) and PD-joints (6.6%).

Conclusions: EGA and painVAS better correlate in PsA patients with high compared to low levels of ultrasound verified inflammation or damage. PainVAS and SJ are the most important clinical determinants of PGA and EGA, respectively whereas the most relevant ultrasound parameters were the GSS-joints and PD-joints score.

Disclosure of Interest: None declared

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SAT0332 DISEASE ACTIVITY TRAJECTORIES IN EARLY AXIAL SPONDYLOARTHRITIS: RESULTS FROM THE DESIR COHORT

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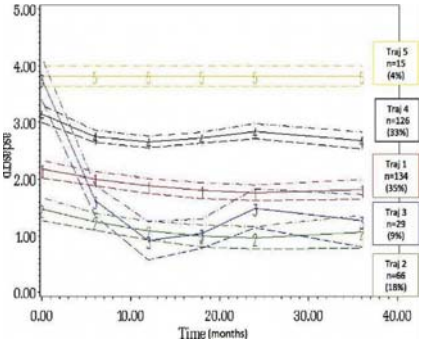
Background: Disease activity over time in axial spondyloarthritis (axSpA) can be heterogeneous, and studies aiming to identify patterns of disease activity are sparse. In other disciplines, trajectory modelling have been applied to identify patterns of behaviour (trajectories) but no studies have attempted to distinguish subgroups with common disease activity over time in axSpA. ASDAS-CRP is a validated tool to measure disease activity, and seems a logical criterion to define the trajectories of disease activity in this setting.

Objectives: To identify the disease activity trajectories in patients with early axSpA over a 3-years follow-up period,the baseline predisposing factors to develop such trajectories and the outcomes associated with each trajectory in terms of sick leave and work disability

Methods: Prospective, multi-centre study (DESIR cohort) of patients with early inflammatory back pain (<3 years duration) suggestive of axSpA. Only patients fulfilling the ASAS criteria and for whom ≥ 3 ASDAS values were available over the 3 years of follow-up were analysed. Statistical analysis: Trajectories were estimated by Group Based Trajectory Modelling; predisposing factors were identified by multinomial regression and days of sick leave/work disability were compared in the trajectories by linear/logistic regression.

Results: In total, 370 patients were included in the analysis. Five distinctive trajectories of disease activity over 3 years were determined: traj 1 (n=134 (35%) persistent moderate disease activity), traj 2 (n=66 (18%) persistent inactive disease), traj 3 (n=29 (9%) very high disease activity at inclusion but reaching inactive disease after 12 months), traj 4 (n=126 (33%) persistent high disease activity) and trajectory 5 (n=15 (6%) persistent very high disease activity): Figure. Traj 1 was set as the reference trajectory for the multinomial regression: a whitecollar job was found to be predictive of developing trajectory 2 (OR=2.2 [1.1-5.0]).Male gender (OR=8.8 [2.2-34.5]), high degree of education (OR=4.7 [1.1-22.0]) and past peripheral involvement (OR=7.0 [1.6-30.1]) were predictive factors to develop traj 3. A high degree of education was found to be protective (OR=0.5 [0.2-0.9]) for developing traj 4.

Traj 5 was significantly associated with sick leave over follow-up ($p<0.001$).Trajectories 4 (OR=6.2 [1.7-41.3]) and 5 (OR=22.7 [2.2-259.1]) were significantly associated with work disability.



Conclusions: This study identified 5 trajectories of ASDAS-CRP. Gender, degree of education and profession were the main baseline factors determining the trajectories. Higher disease activity trajectories were significantly associated withmore days of sick leave and work disability over follow-up. Further analysis including treatments as time-changing covariables will allow us to continue exploring these trajectories.

Disclosure of Interest: None declared

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SAT0333 USE OF GLITAZONES AND THE RISK OF ELECTIVE HIP OR KNEE REPLACEMENT: A POPULATION BASED CASE-CONTROL STUDY

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Background: Osteoarthritis (OA) is the most common musculoskeletal condition in the elderly population. However, to date, no disease modifying drug exists for this disease. In vivo studies have shown that glitazones may be used as anti-arthritic drugs. (Kobayashi, 2005; Boileau, 2007).

Objectives: To determine the risk of total joint replacement (TJR) with the use of glitazones.

Methods: A population based case-control study was performed using the Clinical Practice Research Datalink (CPRD). Cases (n=94,609) were defined as patients >18 years of age who had undergone TJR surgery between 2000 and 2012. Controls were matched by age, gender and general practice. Conditional

logistic regression was used to estimate the risk of total knee (TKR) and total hip replacement (THR) associated with use of glitazones. We additionally evaluated risk of TJR in current glitazone users compared to DM patients using other antidiabetic drugs (ADs). In order to determine a dose effect relationship, we also stratified glitazone users by total number of prescriptions prior to surgery.
Results: There is no difference in risk of TKR (OR=1.11 (95% CI=0.95-1.29)) or THR (OR=0.87 (95% CI=0.74-1.02)) between glitazone users and patients not using glitazones. Furthermore, there is no difference in risk of TKR (OR=1.03 (95% CI=0.88-1.22)) and THR (OR=0.90 (95% CI=0.75-1.08)) when glitazones users are compared to other AD users. Finally, we did not find a dose response effect with increasing number of prescriptions.
Conclusions: This study did not find any evidence for an anti-arthritic effect of glitazones.
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Disclosure of Interest: J. Nielen: None declared, B. van den Bemt Grant/research support from: Pfizer, Roche, Speakers bureau: Pfizer, Roche, Abbvie and MSD, A. Lalmohamed Grant/research support from: Netherlands Organisation for Scientific Research (NWO), A. de Boer: None declared, A. Boonen Grant/research support from: Amgen Abbvie, Pfizer and Merck, Speakers bureau: Pfizer, UCB and Sandoz, P. Dagnelie: None declared, P. Emans Grant/research support from: Stryker, Active implants, Carbylan Biosurgery, DSM Biomedical, Regentis, Speakers bureau: Biomet and Push braces, F. de Vries: None declared
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SAT0334 PATIENT-PHYSICIAN DISCORDANCE IN GLOBAL ASSESSMENT IN RHEUMATOID ARTHRITIS: A SYSTEMATIC REVIEW OF THE LITERATURE

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Background: The integration of the patient in therapeutic decisions (shared decision-making) is an important aspect of management of chronic inflammatory diseases. However, the patient's opinion does not always reflect the physician's opinion. Patient-physician discordance in the global assessment of disease can lead to patient dissatisfaction regarding treatment decisions and negatively affect medical care with potentially poor adherence, and costs for society. Published data on patient-physician discordance appears heterogeneous.
Objectives: The aim of our study was to assess in the published literature the discordance between patients and physicians in the global assessment of rheumatoid arthritis (RA).
Methods: A systematic review of articles published from January 2000 to January 2015 was performed using PUBMED. Keywords used were [rheumatoid arthritis and (discordance or discrepancy) and global assessment]. The outcomes collected were i) definitions used for discordance, ii) percentage of discordance and iii) drivers of global assessment.
Results: In all, 15 articles were identified, 7 were selected. The 7 articles reported on 8532 patients. The weighted mean age was 55.5±13.8 years, 80.5% were women, weighted mean RA duration was 10.8±9.6 years. Five articles (71%) had a cut-off. The cut-off defined as the absolute difference between patient global assessment and physician global assessment was very heterogeneous varying between 0.5 to 3cm on 0-10 visual analog scale. The mean percentage of patients with discordance was 40.3% but varied between 36% and 76%; there was more discordance with a lower cut-off to define discordance. However, a cut-off of 2cm versus 2.5cm or 3cm didn't change the percentage of discordance (around 36%). The drivers of patient global assessment were pain and functional incapacity. Whereas, drivers of physician global assessment were acute phase reactants (ESR, CRP), tender and swollen joints count.
Conclusions: Discordance has a heterogeneous definition in literature. Around one third of patients with RA have a significant discordance with the physician in global asseessment of disease.
This work suggests that patient global assessement is based more heavily on patients' subjective perception of pain and functional incapacity. In contrast, physicians are more focused on "RA-specific outcomes" and such as swollen and tender joints count and acute phase reactants. Taking into account the patient perspective is important but aspects such as widespread pain syndrome, personal factors and culture may play a role in discordance.
Disclosure of Interest: None declared
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SAT0335 BREASTFEEDING IS ASSOCIATED WITH A DECREASED RISK OF ACPA-POSITIVE RHEUMATOID ARTHRITIS: RESULTS FROM THE SWEDISH EIRA STUDY

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Background: Breastfeeding has been associated with both a decreased [1,2] and an increased [3] risk of developing RA. To our knowledge no previous study has investigated the impact of breastfeeding on the two subgroups of RA, characterized by presence/absence of antibodies to citrullinated peptides (ACPA).
Objectives: To study the association between breastfeeding and the risk of ACPA-positive and ACPA-negative RA among women aged 18-70.
Methods: Data from the population-based EIRA (Epidemiological Investigation of RA) case-control study was analyzed. In total, 938 incident cases and 1917 controls participated between 2006-2011. An extensive questionnaire was answered by the participants, including questions regarding duration of breastfeeding for each delivered child and potential confounders (education, smoking, BMI, oral contraceptive use, postmenopausal hormone therapy, reproductive factors). Total history of breastfeeding was categorized into 0-3, 4-7, 8-12, 13-19 and $\geq$20 months, using the lowest category as the reference group. We calculated odds ratios (ORs) with 95% confidence intervals (CI) by means of unconditional logistic regression, adjusting for age, residential area and number of children.
Results: A longer duration of breastfeeding was associated with a decreased risk of ACPA-positive RA (OR 4-7 months=1.0, 95% CI 0.7-1.4; OR 8-12 months=0.8, 95% CI 0.6-1.2; OR 13-19 months=0.6, 95% CI 0.4-0.9; OR $\geq$20 months=0.7, 95% CI 0.4-1.0) compared to parous women who breastfed less than 3 months. No association between breastfeeding and ACPA-negative RA was found.
Conclusions: Our results indicate that a longer duration of breastfeeding reduces the risk of ACPA-positive RA among parous women, but has no association with the risk of ACPA-negative RA. Further research is needed to explore the biological mechanisms behind our findings but our study contributes to the knowledge of environmental risk factors such as breastfeeding and its different impact on the subgroups of RA.
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SAT0336 DEVELOPMENT OF AN ALGORITHM TO IDENTIFY SERIOUS OPIOID TOXICITY IN CHILDREN

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Background: The use of opioids is increasing in children; therefore, opioid toxicity could be a public health problem in this vulnerable population. However, we are not aware of a published algorithm to identify cases of opioid toxicity in children using administrative databases.
Objectives: We sought to develop an algorithm to identify cases of opioid toxicity in children using administrative databases.
Methods: After review of literature and de-identified computer profiles, a broad set of ICD-9 CM codes consistent with serious opioid toxicity was selected. Based on these codes, we identified 195 potential cases of opioid toxicity in children enrolled in Tennessee Medicaid. Medical records were independently reviewed by two physicians; episodes considered equivocal were reviewed by an adjudication committee. Cases were adjudicated as definite/probable, possible, or were excluded.
Results: Of the 195 potential cases, 168 (86.2%) had complete records for review and 85 were confirmed cases. The overall positive predictive value (PPV) for all codes was 50.6%. The PPV for codes indicating: unintentional opioid overdose (25/31) was 80.7%; intentional opioid overdose (15/30) was 50.0%, adverse events (33/58) was 56.9%, the presence of signs or symptoms compatible with opioid toxicity (12/47) was 25.5%, and no cases were confirmed in records from the two deaths. Of the confirmed cases, 65.8% were related to therapeutic opioid use.
Conclusions: The collective and individual PPV for many ICD-9 CM codes consistent with opioid toxicity is low. For studies utilizing administrative claims, medical record review is to be important to accurately identify episodes of opioid toxicity and optimize case ascertainment.
Disclosure of Interest: None declared
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