baseline predictors of achievement of low disease activity (LDA) in BASDAI (<4) and BASFI (<4) for patients with AS; or DAPSA LDA (<13), DAS28 LDA (<3.2), DAPSA remission (<4), DAS28 remission (<2.6) and BSA <3% for patients with PsA. The maximum improvement (highest change from baseline at either 6 or 12 months) in BASDAI, BASFI, DAPSA, DAS28 was assessed for using multivariate linear regression and the least square means (LSMs). The maximum improvement in HAQ-DI and SF-12 physical component scale (PCS) and mental component scale (MCS) were also assessed among PsA patients.

Results: A total of 492 patients with AS and 333 with PsA had BDI assessments (or criteria for depression) at baseline and were included in the analysis; mean (SD) age was 42.7 (13.2) and 51.5 (12.2) years, respectively. Patients with AS were mostly male (54.1%) and initiated adalimumab treatment (70.9%) with mean (SD) disease duration of 5.4 (9.1) years; for PsA, sex was evenly distributed (female 50.5%), 66.4% initiated treatment with adalimumab and mean (SD) disease duration was 14.7 (13.7) years. The prevalence of depression at baseline was 24.6% and 25.5% in patients with AS and PsA, respectively.

Upon adjusting for potential confounders, presence of depression in patients with AS was associated with significantly lower odds of achieving BASDAI LDA (OR: 0.51, $p=0.021$) and BASFI LDA (OR: 0.52, $p=0.045$) during treatment. In these analyses, positive HLA B27 status was also identified as a significant positive predictor of either outcome (OR_{BASDAI LDA}: 1.91, $p=0.016$; OR_{BASFI LDA}: 1.98, $p=0.029$), while older age was identified as a negative predictor of BASFI LDA achievement (OR: 0.98, $p=0.044$). Similarly, patients with depression experienced significantly lower improvements in BASDAI (LSM: -1.72 vs. -2.44; $p=0.007$), and BASFI scores (-1.46 vs. -2.02; $p=0.029$) compared to those without depression.

Among patients with PsA, presence of depression appeared to be associated with lower odds of achieving DAPSA remission (OR: 0.35, $p=0.070$). No association was observed between presence of depression and DAPSA LDA, DAS28 LDA or remission, and BSA<3%. In terms of disease improvement, significant lower improvement in DAPSA score (LSM: -11.00 vs. -14.66; $p=0.047$) and SF-12 MCS (LSM: -3.01 vs. 4.36; $p=0.007$) were observed among patients with depression.

Conclusion: A significant proportion of AS and PsA patients suffer from depression. Baseline depression seems to negatively affect treatment outcomes in both AS and PsA patients. Whether this is due to differences in the assessment of patient-reported outcomes or due to physiological differences remains to be confirmed.

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SAT0335 CLINICAL COURSE OF ANKYLOSING SPONDYLITIS (AS) IN PREGNANCY: INTERIM DATA FROM PROSPECTIVE STUDY

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Objectives: To study the dynamics of clinical signs, AS activity and patients' functional status during gestation.

Methods: 19 pregnant females with confirmed AS based on modified NY criteria (1984) were included. Patients' mean age was 32.2±1.1y., mean age at AS onset was 22.6±3.1 y., mean disease duration was 14.7±2.0, 7 months. Control visits were scheduled at 10-11, 20-21 and 31-32 weeks of pregnancy. BASDAI and ASDAS-CRP calculators were used to assess AS activity, while patients' functional status was assessed using BASFI and BASMI scores, and MASES score was used for evaluation of enthesitis.

Results: Pregnancy outcomes included 18 full-term births at 37.6±1.1 weeks of gestation, and a non-developing pregnancy at 18 weeks in one case. Newborns' weight – 3518±67 g.

Inflammatory low back pain at conception was reported by 78.9% of participants with mean pain intensity 2.2±0.4 scores by NRS. Pain during pregnancy was observed in 95% of all patients, its intensity increased by the II trimester (4.6±0.7) and persisted at the same level in the III trimester ($p<0.05$ between conception and II & III trimesters). Patients reported changing pain patterns by the III trimester: 55.5% noticed pain improvement at rest, and 61.1% indicated exacerbation of pain after physical exercise. Enthesitis rates and intensity were also increasing in the course pregnancy: MASES score was higher in the III trimester (2.3±0.5) vs I trimester (0.4±0.22, $p<0.05$). Meanwhile the rates of AS others non-axial and non-skeletal manifestations were not changing during gestation.

BASDAI score was increasing from the moment of conception (1.7±0.3) until the II trimester (3.3±0.5, $p<0.05$), staying thereafter at the same level in the III trimester. Multivariate regression revealed BASDAI score ($R^2=0.7$) and low back pain ($R^2=0.9$) at conception, as well as biological therapy at 3 months prior to conception ($R^2=0.7$) as orchestrated predictors of relevant BASDAI score in III trimester. During all pregnancy the BASDAI score was predetermined by assemblage of low back pain intensity ($\beta=0.6$), fatigue ($\beta=0.6$), and enthesitis-associated pain ($\beta=0.3$). Increasing fatigue (by 68.5%), and low back pain (by 24.1%) generated BASDAI score increment by the end of the I trimester. While during the II trimester further increase in BASDAI score was provided by exacerbation of enthesitis (30.7% increment), and back pain (27% increment). ASDAS-CRP score was relatively stable with some trend to increase in the II trimester (2.3±0.3) as compared to baseline at conception (1.7±0.2). CRP also showed some increase in the II the trimester (9.7±2.9 mg/ml) vs I trimester (6.7±2.4 mg/ml, $p>0.05$).

BASMI score insignificantly changed during all 3 trimesters (1.3±0.9; 1.8±0.2; 2.1±0.3 – in I, II and III trimesters, correspondingly). BASFI score showed increase by the III trimester (3.9±0.7) as compared to I trimester (1.4±0.3, $p<0.05$). Score increase in the III trimester was due to increased AS activity interfering with habitual physical performance, and also due to pregnancy (forward bend, questions 1,2,4).

Conclusion: AS clinical activity increases by the II trimester of pregnancy and persists at moderate and high levels afterwards during all gestation period. AS activity at conception can predetermine AS activity during all pregnancy. 50% of pregnant patients are likely to experience low back pain in the III trimester due to increasing pressure of a growing fetus on the spine. Functional disability increases with progress in pregnancy, being caused in the III trimester by both – AS activity and pregnancy per se.

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SAT0336 CLINICAL DIAGNOSES OF AXIAL SPONDYLOARTHRITIS SHOW A HIGH OVERALL CONCORDANCE WITH CLASSIFICATION CRITERIA FULFILMENT, BUT ARE LESS CONSISTENT FOR DIFFERENTIATION BETWEEN SUBTYPES IN ESTABLISHED AXIAL DISEASE: RESULTS FROM THE SPARTAKUS COHORT

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Background: The ASAS axial SpondyloArthritis (axSpA) criteria encompass radiographic (r-axSpA) and non-radiographic (nr-axSpA) disease to enable classification early, while the modified New York criteria (mNY) for Ankylosing Spondylitis (AS) require radiographic sacroiliitis. Studies of agreement between clinical diagnoses of axSpA and classification criteria are sparse, especially for nr-axSpA.

Objectives: To study the concordance between clinical axSpA diagnoses and classification criteria fulfilment (mNY and ASAS axSpA) in a population-based cohort of established axSpA, and to compare demographics and outcomes between radiographic axSpA and nr-axSpA.

Methods: Patients with clinical diagnoses (ICD-10) of AS (M45.9) or undifferentiated spondyloarthritis (USpA; M46.0, M46.1, M46.8, M46.9),

followed at Skåne University Hospital, and living in a defined area of southern Sweden were assessed in a cross-sectional study. USpA patients had to report back pain ≥ 3 months before age 45, by telephone screening, to be eligible. To enable classification, included patients underwent clinical assessments, a classification questionnaire, blood testing (including HLA-B27), and scoring of plain X-rays and MRI scans of the sacroiliac joints by an experienced radiologist.

Results: Out of 233 patients with clinical AS or axial USpA, 198 (85%) fulfilled either mNY or ASAS axSpA classification criteria, while 35 (15%) met neither criteria set. Among 118 patients with a clinical AS diagnosis, 103 fulfilled ASAS axSpA criteria and 84 mNY criteria (positive predictive value [PPV] of clinical AS diagnosis for fulfilling mNY criteria was 71% and for ASAS r-axSpA 69%). For 115 patients with a clinical USpA diagnosis, 89 fulfilled ASAS axSpA criteria, while a higher number was classified as AS (n=48) than nr-axSpA (n=36; PPV of clinical USpA diagnosis for fulfilling nr-axSpA criteria was 31%) (**Figure**).

Comparing characteristics between patients classified as radiographic axSpA (AS [mNY] and/or ASAS r-axSpA) vs. ASAS nr-axSpA, few differences were observed; the former were older, more often men, had longer disease duration and worse spinal mobility (**Table**).

Table. Clinical characteristics and outcome measures

	Radiographic axSpA ^a	nr-axSpA	Radiographic SpA vs. nr-axSpA	No axSpA
	n=141	n=57	<i>p-value*</i>	n=35
Age, years	54 (14)	45 (12)	≤ 0.001	49 (12)
Male sex, n (%)	88 (62)	18 (32)	≤ 0.001	10 (29)
Symptom duration, years	29 (14)	19 (11)	≤ 0.001	20 (13) [†]
HLA-B27 positive, n (%)	115 (84)	48 (84)	0.83	4 (11) [§]
ASDAS-CRP	1.9 (1.0)	1.9 (0.9)	0.94	2.0 (1.0)
BASDAI	3.1 (2.3)	3.2 (2.1)	0.77	3.9 (2.4)
BASFI	2.3 (2.4)	2.1 (2.1)	0.51	2.8 (2.3)
BASMI	3.4 (1.8)	2.3 (1.1)	≤ 0.001	2.7 (1.0) [†]

Mean (SD) unless indicated. Missing data 0-14%

*Statistical comparisons by Student's t-test or Chi-Square test

^aASAS r-axSpA and mNY together.

[†]statistically significant difference ($p < 0.05$) radiographic axSpA vs. no axSpA and [§]nr-axSpA vs. no axSpA.

Conclusion: The overall concordance between clinical diagnoses and fulfilment of axSpA classification criteria was good, with $>4/5$ meeting any criteria. For disease subtypes, however, the agreement was substantially weaker, and a large group of patients with USpA in this established cohort fulfilled the mNY criteria for AS. The results indicate that in studies aiming to compare radiographic and non-radiographic axSpA, classification according to defined classification criteria is important.

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SAT0337

MORE THAN 30% PATIENTS WITH EARLY AXIAL SPONDYLOARTHRITIS PRESENT WITH PERIPHERAL ARTHRITIS: INCIDENCE AND FACTORS ASSOCIATED DURING 5 YEARS OF FOLLOW-UP OF THE DESIR COHORT

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Background: Peripheral arthritis is the most frequent peripheral manifestation in Spondyloarthritis (SpA). However, there is a lack of knowledge about its prevalence and incidence over time in recent axial SpA (axSpA). Objectives: a) To describe the prevalence and incidence of peripheral arthritis during 5 years of follow-up on the DESIR cohort; b) to describe the time of onset regarding axial symptoms; c) to evaluate factors associated with their appearance; d) to evaluate the impact of this symptom on treatment, Patient Reported Outcomes (PROs) and sick leave during 5 years of follow-up.

Methods: Data from the early axSpA patients from the DESIR cohort (first 5 years of follow-up) were analysed. The prevalence and the incidence of peripheral arthritis at each study visit were calculated. A Kaplan-Meier curve was performed to evaluate the time of onset of this manifestation regarding the axial symptoms onset. Univariate and multivariate logistic regressions were performed to evaluate baseline factors associated to the development of the arthritis. We compared the use of drugs between patients with and without arthritis by Chi-square test, and finally we evaluate the impact of this symptom on PROs (BASDAI, BASFI and SF36-questionnaire) and on days of sick leave after 5 years of follow-up through the use of a mixed model with random effects (patients).

Results: Out of the 708 patients included in the analysis, 255 (36.0%) showed at least one episode of arthritis (151 before the inclusion visit, and 104 during the follow-up), with a time-person rate of 3.7 cases per 100 person-year. Regarding axial symptoms, 20.4%, 13.70% and 65.9% patients suffered the first episode of arthritis before, concomitantly and after axial symptoms onset, respectively. Multivariate analysis showed that baseline factors associated to the development of arthritis are age ≥ 33 years (OR 1.60, 95%CI 1.12-2.27), non-smokers (OR 1.58, 95%CI 1.10-2.27), HLAB27 negative (OR 1.47, 95%CI 1.04-2.08), CRP $>6\text{mg/dl}$ (OR 1.99, 95%CI 1.35-2.92), no history of uveitis (OR 2.03, 95%CI 1.07-3.84), dactylitis (OR 8.50, 95%CI 4.96-14.60) and enthesitis (OR 2.00, 95%CI 1.41-2.84). Concerning the use of drugs, patients with arthritis showed a significant greater use of TNF blockers (49.4% vs. 29.1%, $p < 0.001$), csDMARDs (40.4% vs. 13.9%, $p < 0.001$), oral corticosteroids (37.6% vs. 22.1%, $p < 0.001$) and ≥ 1 intraarticular corticosteroids (31.0% vs. 6.8%, $p < 0.001$), in comparison with patients without history of arthritis. We did not find differences concerning NSAIDs, intramuscular and intravenous corticosteroids. Finally, the mixed model showed that, after 5 years of follow-up, patients with arthritis had higher levels on BASDAI (40.5 $\pm$ 22.6 vs. 34.3 $\pm$ 20.7, $p < 0.001$) and BASFI (27.9 $\pm$ 23.2 vs. 22.5 $\pm$ 21.0, $p = 0.001$), poorer quality of life (SF36-mental component 42.7 $\pm$ 11.7 vs. 44.0 $\pm$ 11.0, $p = 0.003$; SF-36 physical component 40.9 $\pm$ 9.7 vs. 43.1 $\pm$ 0.2, $p < 0.001$) and higher number of days of sick leave (18.0 $\pm$ 57.5 vs. 12.8 $\pm$ 47.2, $p = 0.024$).

Conclusion: In recent axSpA, 36% of patients reported peripheral arthritis at any time of the disease, and this appeared more frequently after axial symptoms onset. This symptom is more prevalent among patients with HLAB27 negative, non-smokers, with high CRP and with other peripheral manifestations. Arthritis were associated with a greater use of bDMARDs, csDMARDs and corticosteroids, and had an impact on function, quality of life and days of sick leave.

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SAT0338

DELAYED DIAGNOSIS OF ANKYLOSING SPONDYLITIS: RESULTS FROM A SURVEY OF 1690 US PHYSICIANS FROM 10 SPECIALTIES

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Background: There is a significant delay in the diagnosis of ankylosing spondylitis (AS) in the United States. Several studies have estimated that