mSASSS value was 3.8 (IQR 1.0–22.1) in AS and 0.0 (IQR 0.0–1.4) in nr-axSpA patients. The mean Berlin AS Spine Score for patients with axSpA was 5.3 (SD 7.1). Patients received a treatment with NSAIDs (62.7%), DMARDs (20.9%) and/or biologics (49.4%). A significant correlation of the ASAS HI was found for BASMI ($r=0.5$), BASDAI ($r=0.7$), ASDAS ($r=0.5$), BASFI ($r=0.8$), BMI (0.3) and Berlin Score (0.3). ASAS HI did not correlate with radiographic damage (mSASSS $r=0.2$, presence of bamboo spine $r=0.2$) and CRP ($r=0.07$). Stratifying patients by symptom duration (cut-off 3 years) did not affect these results. Logistic regression showed influence of obesity but not of inflammation or structural damage on global functioning (table 1).

Abstract AB0893 – Table 1

	Univariable		Multivariable	
	OR (CI)	p	OR (CI)	p
Age	1.04 (1.02–1.06)	0.001	-	NS
Male sex	0.47 (0.24–0.93)	0.003	0.09 (0.01–0.71)	0.022
BMI	1.10 (1.03–1.18)	0.006	1.24 (1.05–1.48)	0.013
BASDAI, 0–10	1.35 (1.17–1.57)	<0.001	-	NS
ASDAS	2.51 (1.76–3.57)	<0.001	-	NS
BASFI, 0–10	2.03 (1.66–2.48)	<0.001	1.85 (1.19–2.87)	0.006
BASMI, 0–10	2.0 (1.56–2.54)	<0.001	-	NS
mSASSS, 0–72	1.02 (1.00–1.05)	0.089	-	NS
Berlin Score, 0–72	0.98 (0.91–1.04)	0.490	-	NS

Conclusions: The influence of obesity on functioning is remarkable in patients with SpA. In contrast, the influence of structural damage and spinal inflammation on functioning was limited in this study, probably due to the relatively low mSASSS and MRI scores. Further studies with inclusion of more severely affected patients are needed to study the association of functioning, spinal mobility, obesity and radiographic damage over a broader range of affected patients.

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AB0894

A COMPARISON OF CLINICAL FEATURES IN PATIENTS WITH SPONDYLOARTHRITIS AND UNILATERAL OR BILATERAL HIP ARTHRITIS

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Background: Axial spondyloarthritis (AS) is a frequent chronic and progressive disease that affects mainly young adults and is characterised by inflammation of the axial skeleton, but peripheral joints such as hips may also be involved. The incidence of hip involvement in AS is around 30%.¹ Nevertheless, data concerning clinical features in patients with spondyloarthritis comparing unilateral and bilateral hip arthritis are lacking.

Objectives: To compare clinical, functional and radiologic outcomes in patients with AS with unilateral or bilateral hip arthritis.

Methods: Cross-sectional study on 100 patients with AS according to the ASAS criteria of 2009² who had unilateral and bilateral hip joint lesions defined by hip pain, limited joint motion and radiographic hip abnormalities. Demographic and clinical outcomes were performed including HLA B27 status. Spinal mobility outcomes were assessed by Schöber index and Bath Ankylosing Spondylitis Metrology Index (BASMI). Radiographic measurements were performed and included Bath Ankylosing Spondylitis Radiology Index (BASRI) and modified Stoke Ankylosing Spondylitis Spinal Score (mSASSS).

Results: Bilateral hip joint lesion was reported in 76% of patients which 14 were women and mean age was 37.14 years. Bilateral hip involvement was associated with less height ($p=0.002$), more long disease duration ($p=0.015$), more several clinical spinal involvements with more spinal stiffness ($p=0.000$) and less spinal mobility ($p=0.004$). Extra-articular manifestations were comparable in patients with unilateral and bilateral hip arthritis ($p=0.55$), however HLA B27 antigen was significantly more common ($p=0.003$) in patients with bilateral hip arthritis. BASRI hip ($p=0.042$) and mSASSS ($p=0.009$) scores were used to assess structural damage on plain radiographs and were significantly more important in bilateral involvement. Nevertheless, protrusive form was more frequent in patient with unilateral hip involvement ($p=0.05$).

Conclusions: Bilateral hip arthritis seems to be more frequent and more severe than unilateral involvement in patients with AS.

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AB0895

ARE LATERAL SPINE BONE MINERAL DENSITY MEASUREMENTS USEFUL IN AXIAL SPONDYLOARTHRITIS?

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Background: Bone loss leading to osteoporosis (OP) is a well-known feature of axial spondyloarthritis (AS) although this disease is characterised by calcification in extra osseous tissues and new bone formation. In fact, dual-energy X-ray absorptiometry (DEXA) is the most common imaging method used to measure the bone mineral density (BMD). However, many studies have shown an inferiority of the postero-anterior (PA) spine measurements in reflecting the bone loss compared to lateral spine measurements because of the bridging syndesmophytes which may overestimate the BMD.

Objectives: Our aim is to evaluate the Lateral spine BMD (L-BMD) in AS and to assess its association with the disease features.

Methods: Seventy-five patients who met the Modified New York Classification criteria for AS were enrolled in this cross-sectional study. BMD was measured using DEXA at PA lumbar, lateral lumbar and hip regions.

Results: Sixty-two men and 13 women were enrolled with an average age of 36.8 ± 11.8 years. Bone loss (osteopenia or OP) was noted in 65% of the patients ($n=46$) in PA lumbar and in 63% in lateral lumbar ($n=45$). In L-BMD, BMD was correlated with early menopause and vitamin D level ($p=0.01$ and $p=0.04$ respectively). T-score in lateral spine was correlated with coffee consumption ($p=0.02$), physical inactivity ($p=0.037$), sexual hormones disorders ($p=0.02$), hip arthritis ($p=0.017$), BASMI ($p=0.001$), BASFI ($p=0.03$) and ASDAS_{VS} ($p=0.03$) scores, ESR ($p=0.003$) and CRP ($p=0.03$) levels, and hip ($p=0.004$), spine ($p=0.007$) and total ($p=0.001$) BASRI.

Conclusions: L-BMD seems to be a reliable measurement in AS, and may avoid the overestimation of the BMD values and allows consequently to detect spinal osteoporosis and prevent fractures in AS.

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AB0896

ASSOCIATION OF IGA ANTIBODIES AGAINST CD74 WITH PRODUCTION OF IL17A BUT NOT OF TNFALPHA IN PATIENTS WITH ACTIVE AXIAL SPONDYLOARTHRITIS

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Background: Axial spondyloarthritis (axSpA) is strongly associated with HLA-B27. Recently, IgA antibodies (Abs) against CD74 (IgA-anti-CD74) and T-cells carrying CD-74-specific T-cell receptors were also found to be associated with axSpA, especially in patients with ankylosing spondylitis, the radiographic form of axSpA. Tumour necrosis alpha (TNF α) inhibitors and IL-17 antagonists are efficacious in patients with active axSpA.

Objectives: To investigate whether IgA-anti-CD74 Abs are associated with pro-inflammatory cytokines in the sera of patients with HLA-B27-positive and -negative patients with active axSpA.

Methods: Blood samples of 62 HLA-B27-positive and 58 HLA-B27-negative patients with axSpA (44% AS) prior to starting a biologic therapy were collected. A cytometric bead-array (CBA Flex Set) was used to measure serum levels of interleukin (IL)–17A, IL-6, IL-1 α , TNF α , and interferon (INF)- γ . IgA-anti-CD74 Abs were measured by ELISA, using the predefined cut-off of 15 U/ml. Their mean concentrations were compared between groups using T-tests. The patients who were positive or negative for IgA-anti-CD74 Abs were compared using chi-square test.

Results: IgA-anti-CD74 Abs were detected in 54/120 axSpA patients (45%). There were no differences in the baseline demographics and clinical assessments in patients with or without IgA-anti-CD74 Abs. The presence of IgA-anti-CD74 Abs

was associated with higher serum concentrations of IL-17A ($p=0.01$), irrespective of the presence of HLA-B27, CRP and IL-6 (both $p<0.05$) but not TNF α ($p=0.2$).

Conclusions: In a cross-sectional study, the presence of IgA Abs against CD74 was associated with serum levels of pro-inflammatory biomarkers such as CRP (and IL-6) and IL-17 but not TNF α irrespective of HLA-B27 status. Longitudinal prospective studies are needed to show that the measurement of IgA anti-CD74 Abs and/or serum cytokines can help to guide treatment decisions.

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AB0897 THE RELATIONSHIP BETWEEN DISEASE-SPECIFIC INDICES AND BALANCE IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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Background: Axial and peripheral joint stiffness, impaired joint mobility and postural deformities may affect balance in AS. However factors affecting balance in AS patients are still unclear. There is limited literature investigating balance-related factors in patients with AS and the results are contradictory.

Objectives: The aim of the study was to investigate relationship between disease-specific indices and balance in patients with AS.

Methods: 72 patients (46 male, 26 female) with AS were included in the study. The demographic and anthropometric features (age, weight, height, body mass index (BMI)) of patients were recorded. Disease-specific indices used in the study were Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI) and Bath Ankylosing Spondylitis Mobility Index (BASMI). BASDAI for disease activity, BASFI for functional capacity, BASMI for spinal mobility were used. Static and dynamic balance was evaluated with Biodex Balance System SD. Limits of stability and bilateral stance (stable and unstable platform), single leg stance (stable platform) postural stability test results were recorded. Overall stability (OA) indices were used. A high score in the OA index indicates poor balance. Spearman correlation test used for statistical analysing. Correlation analyses were performed between BASDAI, BASFI, BASMI scores and Biodex test results

Results: The mean age of patients was 39,95±8,84 years and mean BMI was 26,55±3,82 kg/m². BASDAI, BASFI and BASMI scores of patients are shown in table 1.

Abstract AB0897 – Table 1. BASDAI, BASMI and BASFI scores

	AS patients (n=72) Median (IQR 25–75)
BASDAI	2,10 (1,02–3,78)
BASFI	1,10 (0,30–2,74)
BASMI	2,20 (1,00–3,40)

Only positive weak correlation was found between BASFI score and right leg stance overall postural stability index ($r=0,25$, $p=0,034$). No other correlation was detected between BASDAI, BASFI, BASMI scores and Biodex balance test results.

Conclusions: The results of our study indicated that there is no relationship between BASDAI, BASFI, BASMI scores and balance except BASFI score and right leg stance postural stability. Our results contradict some previous studies while supporting some studies. This may be due to in our study BASDAI, BASFI and BASMI scores are lower than previous studies or the usage of different methods from previous studies for evaluating balance and postural stability in AS. Further studies are required to establish the actual status of relationship between balance and clinic measurements in AS patients.

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AB0898 COURSE OF ANKYLOSING SPONDYLITIS IN PREGNANCY

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Objectives: To study the effect of pregnancy on ankylosing spondylitis (AS) course.

Methods: 86 AS patients having pregnancy in the course of the disease were included into questionnaire survey. Patients' mean age was 34 [30:37] years, mean disease duration was 120 [72:180] month. The questionnaire items were designed to elucidate modifications in AS course during the last pregnancy with live birth outcome. The study is based on patient's self-reported health (SRH) status (improvement, worsening, no change).

Results: All responders reported delivery of full-term babies at mean 39 weeks [38:40] of gestation, vaginal delivery was documented by 46 (53,5%) responders, Caesarean section – by 40 (46,5%). AS worsening or improvement during all three trimesters is shown in the table 1.

Abstract AB0898 – Table 1

Trimester	Improvement n=42/ 48,8%	Worsening n=58/ 67,4%
I	30/34,8%	15/17,4%
II	21/24,4%	26/30,2%
III	18/20,9%	36/41,8%

Comparison of improvement rates in I and III trimesters, $p=0,05$.

Worsening of underlying disease (as compared to the condition 3 months prior to pregnancy) during whole pregnancy was reported by 3 (3,5%) women, absence of noticeable changes was reported by 13 (15,1%) patients, and AS improvement – by 9 (10,4%) participants.

61 (71%) of responders reported fluctuating AS activity during pregnancy. AS worsening was associated with exacerbation of back pain in 44 (51%), emergence and/or recurrence of arthritis – in 15 (17,4%), or uveitis – in 9 (10,4%), and other symptoms – in 11 (12,8%) patients.

Conclusions: Therefore, the majority of participants reported the diverse fluctuations in AS course during pregnancy, although 50% of responders reported the improvement in the course of the disease at least during one trimester (more often in the first). Nevertheless, almost 70% of responders reported AS worsening with exacerbations rates increasing in parallel with increasing gestation age. 50% of participants noticed worsening back pain, although special attention should be given to correct evaluation of AS activity in these patients keeping in mind the increased physiological load on the backbone during the second half of pregnancy.

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AB0899 ANKYLOSING SPONDYLITIS AND PREGNANCY: DATA FROM THE QUESTIONNAIRE SURVEY-BASED PILOT STUDY

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Objectives: To study parity and pregnancy outcomes, as well as causes for not getting pregnant in women with ankylosing spondylitis (AS).

Methods: 326 AS female patients were covered by questionnaire survey during the period from November 2016 until October 2017. Mean age of the participants was 32 [28:36] years, mean AS duration – 102 [48:168] months. The questionnaire items covered such issues as prior pregnancies, maternal and neonatal outcomes and potential reasons for not getting pregnant.

Results: 194 (59%) (mean age 34,1±5,4 y) females out of 326 surveyed had from 1 to 8 pregnancies, totally 396. Pregnancy outcomes are presented in the table 1.