Objectives: To compare the incidence of complications in HLA-B27- associated anterior uveitis patients with and without spondyloarthritis (SpA).

Methods: 189 patients with HLA-B27- associated anterior uveitis were observed in Research Institute of Eye Disease for 10 years. The pts were underwent standard ophthalmological examination, and, if necessary, computer perimetry, ultrasound examination (B-scan), optical coherence tomography of the retina and optic nerve (OCT), fluorescence fundus angiography (FAGD) and electrophysiological studies (EFI). All pts were examined for clinical and imaging signs of SpA: inflammatory back pain, arthritis, enthesitis, sacroiliitis.

Different variants of SpA were diagnosed in 108 pts: ankylosing spondylitis – in 48 (44.4%), reactive arthritis – in 9 (8.3%), psoriatic arthritis – in 9 (8.3%), inflammatory bowel disease – in 2(1.9%), juvenile SpA – in 4 (3.7%), undifferentiated SpA – in 36 (33.3%). In 81 pts SpA was not confirmed: 11 had a viral infection (13.5%), 7- bacterial infection (8.6%), 1 (1.2%)-multiple sclerosis, 3 (3.7%) -psoriasis, 59 (72.8%)- idiopathic AU.

Results: Complications were identified in 74 of 108 (68.5%) pts – 147 eyes in SpA-group and in 39 of 81(48.1%) – 110 eyes in group without SpA. Cataract was identified in 89 (60.5%) of 147 eyes in SpA-group and in 35(1.8%) of 110 eyes in group without SpA, $p=0.0001$; glaucoma – in 28 of 147 eyes (19.0%) in SpA-group and 8 of 110 eyes (7.3%) in group without SpA, $p=0.005$; synechia – in 24(16.3%) and in 8 (7.3%) respectively, $p=0.021$; vitreous destruction – in 59(40.1%) and in 26 (23.6%), $p=0.005$. Maculopathy, optic atrophy, corneal degeneration, panuveitis were observed more often in SpA-group, but the differences were not significant. Combinations of several complications were detected in 59 (40.1%) in SpA-group and in 31 (28.2%) in group without SpA, $p=0.03$.

Conclusion: Complications of HLA-B27- associated AU were identified more often in pts with SpA than without SpA (the majority of which was idiopathic AU). It confirms the effect of systemic inflammatory disease on the severity of uveitis.

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THU0401

WOMEN WITH SPONDYLOARTHROPATHIES HAVE HIGHER DISEASE BURDEN ACCORDING TO RAPID3 COMPARED TO MEN, BUT THERE IS NO GENDER DIFFERENCES ACCORDING TO A MODIFIED ASDAS-CRP

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Background: Women with Spondyloarthropathies (SpA) may be late or under-diagnoses due to a less typical presentation than in men, with a more peripheral clinical manifestation. Although some studies have suggested a higher burden of disease in women^{1, 2}, others did not confirm these differences^{3, 4}. In addition, women present higher scores for pain and fatigue, which may influence the BASDAI (Bath Ankylosing Spondylitis Disease Activity Index) score⁵.

Objectives: To evaluate possible gender differences in clinical presentation and disease severity in men and women with SpA in routine care at one academic center.

Methods: All patients complete a Multidimensional Health-Assessment Questionnaire (MDHAQ) as part of their routine care. It includes physical function (FN) (0-10), three 0-10 visual analogue scales (VAS) for pain (PN), patient global estimate (PATGL), and fatigue (FT), RADAI self-reported painful joints, and morning stiffness (MS). Patients with SpA (ICD10 codes) were included: ankylosing spondylitis (AS), psoriatic arthritis (PsA), undifferentiated, and inflammatory bowel disease associated (IBD). Data extracted were clinical presentation, treatment and laboratory tests including C-reactive protein (CRP), HLA-B27 (Human leukocyte antigen), and erythrocyte sedimentation rate (ESR). Composite indices, RAPID3 (0-30) previously validated in SpA, as the sum of 0-10 scores for FN, PN, and PATGL, and a modified ASDAS-crp using a "back pain" score derived from RADAI neck, back and hips; a "peripheral pain" score derived from the remaining RADAI joints; and MS in minutes were also included. Demographic and clinical characteristics were compared according to gender.

Results: 190 patients were included, 60% males and 40% females, with no differences in age, disease duration, and treatment. Men had significantly more frequent inflammatory back pain. Patient global assessment and pain scores were significantly higher in women versus men resulting in a higher RAPID3 (moderate disease severity in both groups). Axial, peripheral pain, morning stiffness and laboratory data did not show differences by gender, and as a result ASDAS-CRP was similar between men and women, with a value corresponding to moderate disease activity (Table).

Abstract THU0401 – Table 1. Demographic and clinical characteristics of patients with SpA by gender. Data as median (IQR) unless otherwise specified (* $p<0.05$)

	Men N=113	Women N=77
Age (yrs), mean (SD)	45.2 (14.4)	47.0 (15.3)
Self-reported race/ethnicity, %	61/15/13/11	50/20/13/17
White/Black/Hispanic/Others		
Disease duration, (yrs)	6.1 (1.4-11)	5.2 (2.1-9.3)
SpA subgroup, %:	57/24/16/3	36/29/31/4*
AS/PsA/Undifferentiated/IBD		
Peripheral arthritis, %	67%	69%
Inflammatory back pain, %	78%	63%*
PROs-MDHAQ		
PATGL	2.5 (1.0-5.0)	5.0 (2.0-7.0)*
Axial pain-RADAI (neck, back and hips)	4 (0.8-5.0)	3.3 (1.7-5.8)
Peripheral pain-RADAI	0.9 (0.2-1.9)	0.9 (0-2.6)
Total PN	3.0 (1.0-6.0)	6.0 (2.0-7.5)*
MS (min)	30 (15-60)	37.5 (15-120)
Fatigue	2.0 (0-6.0)	5 (2.0-8.0)*
Laboratory Data		
HLA-B27 positive, %	66.7%	67.4%
CRP (mg/L)	5 (5-15.6)	5 (5-15.6)
ESR (mm/h)	12 (4-29)	19.5 (9-33)
Composite index, mean (SD)		
RAPID3	7.7 (6.9)	10.9 (7.5)*
Modified ASDAS-CRP	1.8 (0.9)	1.9 (0.9)

Conclusion: Women with SpA have higher RAPID3 scores than men, in contrast to a modified ASDAS-CRP based on scores from the MDHAQ which did not show gender differences. These data suggest that RAPID3 scores in women may be attributable in part to a gender bias rather than clinical severity and a careful interpretation in the context of gender is necessary.

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THU0402

CONTRIBUTION OF THE EOS IMAGING SYSTEM IN ASSESSING PELVIC AND SPINAL DEFORMITIES IN SPONDYLOARTHRITIS

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Background: The severity of Spondyloarthritis (SA) lies mainly in the progressive ankylosis of the axial skeleton and the deformations generated. The means of assessing the spinal static disorders in SA are currently subjective and difficult to reproduce. Multidisciplinary collaboration has led to the development of a new biplane low dose radiology technology named EOS. It allows a simultaneous acquisition of the axial skeleton and the lower limbs in a standard standing position.

Objectives: We aimed to assess pelvic and spinal parameters and spinal stature in patients with SA using the EOS system.

Methods: This is a prospective cross-sectional study conducted over a 10-month period (January-October 2018) involving 50 patients with SA meeting the criteria of Assessment of SpondyloArthritis International Society. An entire body EOS examination of the vertebral column in a standardized standing position was performed in all patients. Pelvic parameters measured by the EOS system were pelvic incidence (PI: normal value: