years. The mean disease duration was 12.65 ± 9.49 years. The clinical presentation of SpA was peripheral in 61 cases and axial in 118 cases. The mean disease scores activity was: BASDAI: 3.94 ± 2.046 and ASDASCRP: 2.75 ± 1.05 . The mean BASFI was 4.17 ± 2.7 .

SP changes were observed in 31 patients: score 1 (n=14), score 2 (n=8), score 3 (n=8) and score 4 (n=4). Sex ratios M/F were 2.1 and 1.65 in G1 and G0, respectively (p=0.23). No statistically significant differences were reported between the two groups G0 and G1: mean age (40.48 vs. 43.45, p=0.324), mean disease duration (11.19 vs. 14.45, p=0.218), mean BASDAI (3.8 versus 3.9, p=0.850), mean ASDAS-ESR (3.09 vs. 2.55, p=0.113) and mean BASFI (3.76 versus 4.96, p=0.06) respectively. In G1, nine patients had hip involvement (p=0.203). Enthesitis was more common in patients with SP changes (p=0.02).

Conclusion: In our study, the presence of enthesitis was associated with SP changes. Surprisingly, age and disease duration did not influence SP changes (1).

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POS1014

CENTRAL SENSITIZATION HAS MAJOR IMPACT ON QUALITY OF LIFE IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS

S. Kieskamp¹, D. Paap¹, M. Carbo¹, F. Wink², R. Bos², H. Bootsma¹, S. Arends¹, A. Spoorenberg¹ on behalf of Groningen Leeuwarden Axial Spondyloarthritis (GLAS). ¹University Medical Center Groningen, Rheumatology and Clinical Immunology, Groningen, Netherlands; ²Medical Center Leeuwarden, Rheumatology, Leeuwarden, Netherlands

Background: Maintaining optimal health-related quality of life (QoL) is the ultimate goal of treatment in axial spondyloarthritis (axSpA). Chronic pain has a large potential impact on QoL. Central sensitization (CS) may explain part of the chronic pain in axSpA. However, the role of central sensitization (CS) herein has only been studied to a limited degree and current axSpA guidelines pay little attention to identification and treatment of CS.

Objectives: To explore the relationship between CS and QoL in axSpA.

Methods: Consecutive outpatients with axSpA from the Groningen Leeuwarden Axial Spondyloarthritis (GLAS) cohort were included. CS was assessed with the Central Sensitization Inventory (CSI; 0-100), QoL with the AS Quality of Life questionnaire (ASQoL; 0-18) and disease activity with the AS Disease Activity Score (ASDAS_{CRP}). A high probability of CS was defined as CSI score ≥ 40 and active disease as ASDAS_{CRP} score ≥ 2.1 . Patient characteristics and clinical assessments were compared between groups with CSI score <40 and ≥ 40 . (1) Multivariable regression analysis was conducted to investigate the relationship between CSI and ASQoL scores, correcting for potential confounders.

Results: Of the 178 axSpA patients with available CSI score, 149 completed the ASQoL. Mean age of the 178 included patients was 47.4 ± 14.1 years, 78 (44%) were female, mean symptom duration was 21.4 ± 13.6 years and 88 (52%) were using bDMARDs. Mean CSI score was 38.0 ± 14.1 , mean ASQoL 6.0 ± 5.3 and mean ASDAS_{CRP} 2.1 ± 1.0 . CSI score ≥ 40 was significantly associated with higher mean ASQoL (9.7 vs. 3.3), higher mean ASDAS_{CRP} (2.6 vs. 1.7), female gender (60% vs. 29%) and more often enthesal involvement (61% vs. 26%) (Table 1).

Table 1. Selection of patient characteristics, disease activity and clinical outcome variables for patients with axSpA, divided in subgroups for CSI score with a cutoff point of 40.

Characteristics	All patients n = 178	CSI<40 n = 98 (55%)	CSI ≥ 40 n = 80 (45%)
Age (years)	47.4 $\pm$ 14.1	48.7 $\pm$ 15.0	45.8 $\pm$ 12.7
Female	78 (44)	27 (29)	44 (60)*
Symptom duration (years)	21.4 $\pm$ 13.6	21.5 $\pm$ 13.5	21.2 $\pm$ 13.8
HLA-B27+	133 (79)	70 (79)	54 (79)
Smoker	45 (27)	28 (32)	15 (23)
BMI (kg/m ²)	26.7 $\pm$ 5.0	26.2 $\pm$ 4.4	27.5 $\pm$ 5.8
Completed higher education ¹	81 (71)	48 (70)	34 (76)
Biological use	88 (52)	49 (52)	39 (51)
RDCI (0-9)	0.0 (0.0 – 1.0)	0.0 (0.0 – 1.0)	0.0 (0.0 – 1.8)
Peripheral arthritis ²	10 (6)	5 (6)	5 (8)
Enthesal involvement ³	64 (40)	23 (26)	38 (61)*
ASDAS _{CRP}	2.1 $\pm$ 1.0	1.7 $\pm$ 0.9	2.6 $\pm$ 1.0*
CRP (mg/ml)	2.9 (1.1 – 6.8)	2.6 (1.1-6.0)	3.6 (1.4 – 7.0)
ASQoL (0-18)	6.0 $\pm$ 5.3	3.3 $\pm$ 3.6	9.7 $\pm$ 4.9*
CSI (0-100)	38.0 $\pm$ 14.1	28.0 (23 – 34)	50.0 (43.0 – 56.0) ^{NA}

Values are n (%), mean $\pm$ SD or median (IQR).¹International Standard Classification of Education (ISCED) level ≥ 4 ; ²Swollen Joint Count >0 ; ³Maastricht Ankylosing Spondylitis Enthesitis Score >0 . *p<0.001. ASDASCRP: Ankylosing Spondylitis Disease Activity Score; ASQoL: Ankylosing Spondylitis Quality of Life questionnaire; CRP: C-reactive protein; CSI: Central Sensitization Inventory; RDCI: Rheumatic Disease Comorbidity Index.

Patients with low ASDAS_{CRP} (<2.1) and also low CSI score (<40) showed good QoL (median ASQoL 1.1). Patients with low ASDAS_{CRP} combined with high CSI score (≥ 40) and patients with high ASDAS_{CRP} (≥ 2.1) combined with low CSI score reported worse QoL (median ASQoL 5.6 and 4.1, respectively). Patients with high ASDAS_{CRP} and also high CSI score reported the worst QoL (median ASQoL 12.0). (Figure 1).

Figure 1. ASQoL score in patients with axSpA with CSI score ≥ 40 and <40 , divided for ASDAS_{CRP} (cutoff 2.1)

Additionally, in univariable analysis, the CSI score explained a large proportion of the variation of the ASQoL ($R^2=0.46$). This association remained significant after correction for ASDAS_{CRP}, gender, symptom duration, enthesal involvement, smoking status, BMI category, educational level and comorbidities in multivariable analysis (CSI p<0.001).

Conclusion: In daily clinical practice, CS seems strongly related to patient-reported QoL in patients with long-term axSpA.

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POS1015

ANTI-TNF DRUGS AND CARDIOVASCULAR EVENTS IN PATIENTS WITH SPONDYLOARTHRITIS

C. W. S. Chan¹, P. H. Li¹, C. S. Lau¹, H. Y. Chung¹. ¹The University of Hong Kong, Queen Mary Hospital, Hong Kong, Division of Rheumatology and Clinical Immunology, Department of Medicine, Hong Kong, Hong Kong (SAR)

Background: Cardiovascular (CVS) diseases are the leading cause of death worldwide and patients with rheumatic diseases have an increased CVS risk including stroke and myocardial infarction (MI) (1-3). CVS risk factors and CVS events are common in SpA (4). Delineating the CVS risk and the association with medications in patients with SpA would be useful.

Objectives: The objective of this study was to delineate the CVS risk and the association with medications in patients with SpA.

Methods: Patients with SpA and patients with non-specific back pain (NSBP) were identified in rheumatology and orthopedics clinics respectively. Clinical information and CVS events were retrieved. Incidence rates were calculated. Association analysis was performed to determine the CVS risk of SpA and other modifiable risk factors.

Results: A total of 5046 patients (SpA 2616 and NSBP 2430) were included from eight centers. Over 56 484 person-years of follow-up, 160 strokes, 84 MI and 262 major adverse cardiovascular events (MACE) were identified. Hypercholesterolemia was more prevalent in SpA (SpA 34.2%, NSBP 28.7%, P<0.01). Crude incidence rates of stroke and MI were higher in SpA patients. SpA was associated with a higher risk of MACE (HR 1.66, 95%CI 1.22-2.27, P<0.01) and cerebrovascular events (HR 1.42, 95%CI 1.01-2.00, p=0.04). The use of anti-tumor necrosis factor (TNF) drugs was associated with a reduced risk of MACE (HR 0.37, 95%CI 0.17-0.80, P=0.01) and cerebrovascular events (HR 0.21, 95%CI 0.06-0.78, P=0.02).