and by a deterioration in functionality and mental status. However, clinical form of SpA, disease duration and structural damage in spine do not explain this decrease of QoL.

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## FRI0435 COMPARISON BETWEEN CENTRAL AND LOCAL ASSESSMENT OF RADIOGRAPHIC SACROILIITIS IN PATIENTS WITH RECENTLY DIAGNOSED AXIAL SPONDYLOARTHRITIS IN PROOF STUDY

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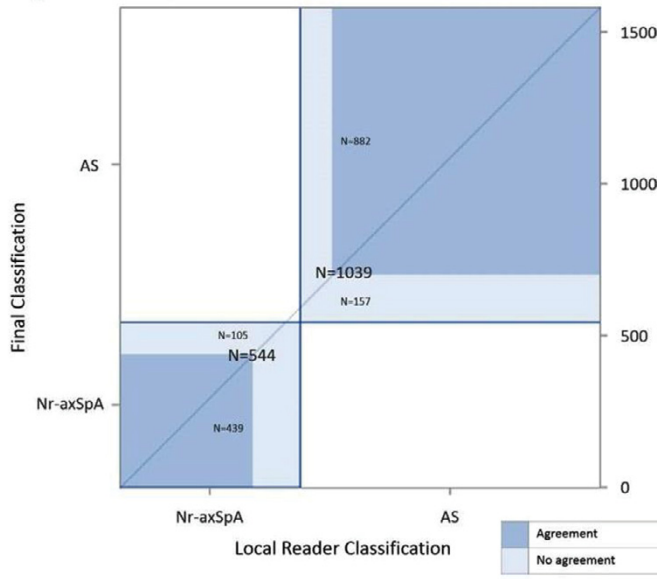
**Background:** High inter-reader variability of radiographic sacroiliitis assessment has been reported in a number of previous studies, suggesting its low reliability for the diagnosing and classification of axial spondyloarthritis (axSpA).

**Objectives:** To compare the results of local versus central scoring of radiographic sacroiliitis in a large multinational cohort of patients (pts) with recently diagnosed axSpA.

**Methods:** PROOF is a prospective observational study evaluating clinical and radiographic outcomes in axSpA pts in rheumatology clinical practice in 29 countries. Pts with axSpA fulfilling ASAS classification criteria were eligible if diagnosed ≤1 year prior to study enrolment. Radiographs of sacroiliac joints (SIJ) collected at baseline were graded according to the modified New York (mNY) criteria (0–4 for each SIJ). Pts with sacroiliitis of grade ≥2 bilaterally or grade ≥3 unilaterally were classified as ankylosing spondylitis (AS); otherwise pts were classified as non-radiographic axSpA (nr-axSpA). All available radiographs were assessed first by a local reader (LR) and then by a central reader (CR1), who was blinded to the results of the LR. In the case of a disagreement in the classification (AS or nr-axSpA), the radiograph was evaluated by the 2nd central reader (CR2), who was blinded to the previous assessments and the final classification was made based on the decision of 2 out of 3 readers.

**Results:** Of the 2126 pts enrolled in PROOF, 1583 were included in this analysis based on evaluable radiographs of the SIJ. Based on the LR judgment, 987 pts were classified as AS and 596 as nr-axSpA, while 1158 were classified as AS and 425 as nr-axSpA according to CR1. Following CR1 assessment, 1146 (72.4%) pts retained their LR classification, while 437 (27.6%) pts were classified differently. Of the 437 pts with discrepant classification assessed by CR2, 175 (40%) retained their initial LR classification and 265 (60%) were re-classified. The agreement between the CR1 and CR2 (kappa=0.24 [95% CI: 0.17–0.32]) was lower than between LR and CR1 (kappa=0.38 [95% CI: 0.33–0.42]). Finally, 1039 pts were classified as AS and 544 as axSpA; 1321 (83.5%) pts retained their initial classification and 262 (16.5%) were re-classified (157 from nr-axSpA to AS and 105 from AS to nr-axSpA). There was a substantial agreement between local and final central classification (kappa=0.64 [95% CI: 0.60–0.68], Figure). Importantly, pts initially classified by a LR as nr-axSpA (157/596, 26.3%) had significantly higher odds (odds ratio=3.0 (95% CI: 2.3–3.9) of being re-classified compared with pts classified as AS (105/987, 10.6%).

**Figure. Final Classification of Patients with axSpA in Relation to Their Initial Local Classification in the PROOF Study Based on the Assessment of the Radiographic Changes in the Sacroiliac Joints.**




AS = ankylosing spondylitis; nr-axSpA = non-radiographic axial spondyloarthritis.

**Conclusions:** In the PROOF study, the agreement between local and central classification of pts with axSpA (nr-axSpA vs AS) based on the grading of SIJ radiographs by mNY criteria was reasonably good. Pts locally classified as nr-axSpA were three times more likely to be re-classified compared with AS pts, which may be related to difficulty in the assessment of less advanced structural changes.

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## FRI0436 CHRONIC PAIN IN PATIENTS WITH ESTABLISHED AXIAL SPONDYLOARTHRITIS AND ASSESSMENT OF PAIN SENSITIVITY BY COMPUTERIZED PNEUMATIC CUFF PRESSURE ALGOMETRY: RESULTS FROM THE SPARTAKUS COHORT

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**Background:** Pain is a common symptom in all arthritides, and remains a problem also with better treatment options. In axial spondyloarthritis (ax-SpA), data on chronic pain remain scarce.

**Objectives:** To study pain distribution, duration and intensity in ax-SpA, and relate this to disease status and measurement of pressure pain sensitivity.

**Methods:** Consecutive patients (n=115) with clinical ax-SpA diagnoses (ankylosing spondylitis (AS) or undifferentiated axial spondyloarthritis (USpA)) were examined and answered pain questionnaires. Patients were categorised as having no chronic pain (NCP), chronic regional pain (CRP) or chronic widespread pain (CWP). Pressure pain sensitivity was assessed by computerized pneumatic cuff pressure algometry (CPA) on the dominant lower leg, and pain threshold, pain tolerance and temporal summation (assessed by the temporal summation index, TSI) were recorded. Differences in disease status and pressure pain sensitivity between patients with CWP versus NCP were assessed (Chi-square or Mann-Whitney U-test). Pressure pain sensitivity was also compared between patients with/without unacceptable pain levels (VAS pain >40 versus ≤40; Mann-Whitney U-test).

**Results:** Fifty percent of patients reported CWP, irrespective of clinical diagnosis (AS 47%, USpA 53%), and more women than men reported CWP (59% versus 37%, p<0.001). Only 18% of all patients reported NCP. Overall, higher disease

| Mean (SD) unless indicated | All cases n=115 | Non chronic pain (NCP) n=20 | Chronic regional pain (CRP) n=38 | Chronic widespread pain (CWP) n=57 | NCP vs CWP p value |
|---|---|---|---|---|---|
| Female sex, n (%) | 66 (57) | 6 (30) | 21 (55) | 39 (68) | 0.004 |
| Age, years, years | 53 (13) | 52 (16) | 49 (13) | 55 (12) | 0.384 |
| Disease duration, years | 25 (14) | 24 (14) | 22 (13) | 29 (14) | 0.148 |
| HLA-B27 positive, yes (%) | 83 (74) | 14 (78) | 30 (79) | 39 (68) | 0.560 |
| AS/USpA (ICD-10) n | 60/55 | 13/7 | 19/19 | 28/29 | 0.299 |
| VAS pain, 0–100 | 37 (27) | 15 (18) | 32 (26) | 49 (24) | <0.001 |
| VAS global | 38 (26) | 19 (22) | 32 (26) | 48 (22) | <0.001 |
| VAS fatigue | 40 (28) | 23 (23) | 33 (28) | 51 (26) | <0.001 |
| BASDAI | 3.5 (2.3) | 1.6 (1.6) | 3.0 (2.0) | 4.9 (2.1) | <0.001 |
| BASFI | 2.5 (2.4) | 1.1 (1.4) | 1.8 (2.3) | 3.7 (2.4) | <0.001 |
| BASMI | 3.1 (1.6) | 2.9 (1.6) | 2.9 (1.9) | 3.3 (1.4) | 0.255 |
| ASDAS-CRP | 2.1 (1.0) | 1.2 (0.7) | 1.8 (0.9) | 2.7 (0.8) | <0.001 |
| Pain threshold ,kPa | 30.1 (14.4) | 33.7 (18.1) | 30.7 (11.5) | 27.8 (14.8) | 0.216 |
| Pain tolerance, kPa | 62.1 (26.5) | 71.6 (29.5) | 63.0 (25.0) | 56.8 (25.6) | 0.069 |
| TSI | 0.60 (0.59) | 0.53 (0.46) | 0.60 (0.57) | 0.63 (0.66) | 0.189 |