

Clinical and imaging-based characterization of a prospective cohort of patients with axial psoriatic arthritis (axial PsA). GESPIC-axial PsA: Results of an interim analysis

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Background

Psoriatic arthritis (PsA) is a chronic inflammatory disease which, together with axial spondyloarthritis (axSpA), is assigned to the group of spondyloarthritis, whose clinical presentation are very heterogeneous. Axial involvement (axial PsA) is present in 1/3 of PsA patients according to the literature [1] and has been systematically studied only retrospectively or in cross-sectional studies [2].

Although axial PsA seems to have similar characteristics to axSpA, it is not clear whether axial PsA and axSpA, are a spectrum of the same disease with different patterns of expression or different diseases with great similarities. Clinical trials e.g. with IL-23 blockade showed little effect in axSpA, while being effective in PsA. However, classification criteria are missing and there is still a need for evidence-based classification criteria for axial PsA.

Objectives

The aim of this study is to observe a well-defined cohort of patients with axial PsA and to investigate clinical and imaging morphology patterns.

Methods Prospective, longitudinal, monocentric observational study of patients with an imaging- and multidisciplinary confirmed diagnosis of axial PsA based on an interdisciplinary evaluation. For a detailed clinical and laboratory characterization, conventional radiographs as well as MRI scans of the entire spine and sacroiliac joints (SIJs) are performed according to a predefined protocol at the baseline visit and patients are followed up clinically every 6 months. After 2 years, additional re-imaging (X-ray and MRI) is performed for follow-up.

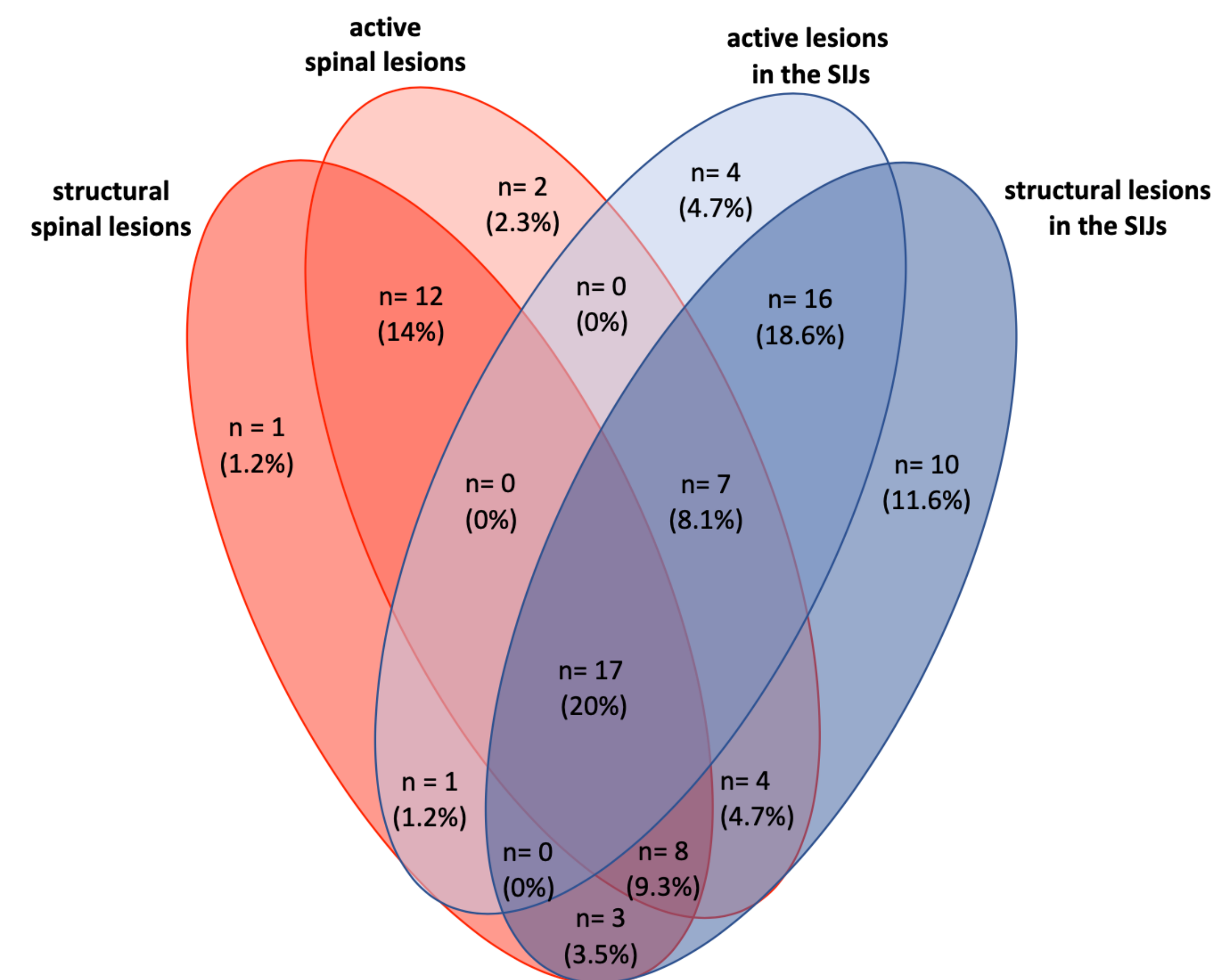


Figure 1: MRI-imaging patterns of axial PsA patients (n=86)

Parameters	n=88
Age in years (mean ± SD)	45.1 ± 12.9
Female sex, n (%)	50 (56.8%)
Inflammatory back pain (IBP) present, n (%)	68 (77.3%)
PASI-Score (mean ± SD)	3.3 ± 5.1
Nail Involvement, n (%)	39 (44.3%)
BASDAI (mean ± SD), 0-10	4.9 ± 2.1
HLA-B 27 positive, n (%)	42 (47.7%)
CRP >5mg/l, n (%)	28 (31.8%)

Table: Clinical characteristics of patients with axial PsA.

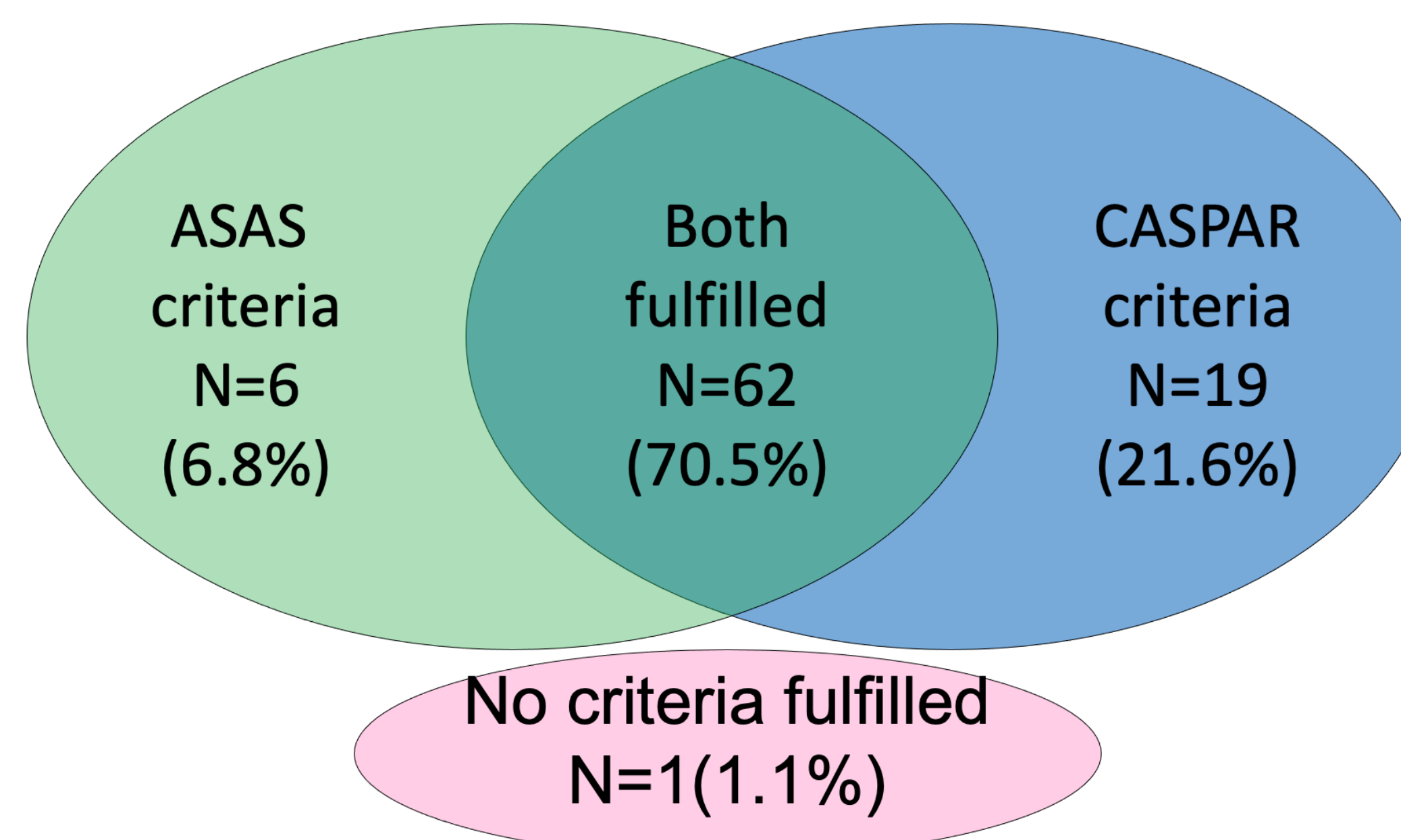


Figure 2: Fulfillment of criteria

Results

During the period 08/2019 - 04/2022, 88 axial PsA patients could be included. The mean age is 45.1 years with a proportion of 56.7% female patients (n=50). Peripheral involvement was present in 44 patients (50%), HLA-B27 was positive in 42 (47.7%) and CRP was found to be elevated in 31.8%. Inflammatory back pain was present in 68 patients (77.3%). When using existing classification criteria for PsA in general or for axial SpA, 92.1% fulfilled CASPAR criteria for PsA and 77.3% the ASAS criteria. The modified New York criteria were fulfilled by 45.8% (n=38). MRI of the SIJ showed active inflammatory changes in 45 (52.3%) and structural changes in 65 (75.6%). MRI of the spine showed active inflammation in 58.1% (n=50). Exclusively active inflammation of the spine without any changes in the SIG showed 17.4% (n=15).

Conclusion

The study presented here is the first prospective cohort study in patients with axial PsA that also includes MRIs according to a standardized protocol. The interim analysis shows that compared to classic axSpA, patients with axial involvement of their PsA are older, less frequently HLA-B27 positive, and more frequently female. CASPAR and ASAS criteria were met by 70% of patients and ¾ demonstrated inflammatory backpain. Imaging showed that a relevant proportion had spinal involvement without active or structural changes in SIJ.

Acknowledgements

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