There were substantial differences concerning localization of the lesions: in OCI, ventral localization was recorded in 96% of the cases for osteitis, in 100% for fatty degeneration, and in 96% for sclerosis, while in axSpA, osteitis was preferentially localised in the ventral part only in 29% of the cases, fatty degeneration in 25%, sclerosis in 29%. Ankylosis and erosions were localised in the mid part in almost all cases.

Abstract FRI0173 – Table 1. Active and chronic lesions of the sacroiliac joints as detected by MRI in patients with osteitis condensans ilii (OCI) and with axial spondyloarthritis (axSpA).

MRI changes	OCI N=27**	axSpA N=27	p-value***
Osteitis score (0-24), mean±SD	3.6 ± 2.3	4.4 ± 4.1	0.89
Osteitis present, n (%)	25 (96.2)	23 (85.2)	0.351
Fatty degeneration score (0-24), mean±SD	2.0 ± 2.3	4.5 ± 6.7	0.001
Fatty degeneration present*, n (%)	14 (51.9)	20 (74.1)	0.158
Erosions score (0-6), mean±SD	0.2 ± 0.4	3.0 ± 2.3	<0.001
Erosions present*, n (%)	2 (7.4%)	18 (66.7%)	<0.001
Ankylosis score (0-2), mean±SD	0	0.3 ± 0.7	0.040
Ankylosis present*, n (%)	0 (0)	4 (14.8%)	0.111
Sclerosis score (0-2), mean±SD	1.4 ± 0.6	1.0 ± 0.8	0.055
Sclerosis present*, n (%)	24 (88.9)	19 (70.4)	0.175

The absolute lesion scores represent mean values of 3 readers. Lesions were considered to be present if the corresponding score was ≥1 in the opinion of at least two readers.

* N=26 for osteitis. ** Derived from the Mann-Whitney U-test for the scale variable or from the Fisher's exact test for the categorical variables.

Conclusions: MRI of sacroiliac joints in OCI is characterised by preferential ventral localization of lesions (osteitis, fatty degeneration, sclerosis), absence of ankylosis and absence of extended erosive changes. Such a findings constellation should be taken into account as suggestive of OCI for the differential diagnosis of axSpA in clinical practice.

Disclosure of Interest: None declared

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FRI0174 SPINAL RADIOGRAPHIC PROGRESSION IN EARLY AXIAL SPA: 5-YEAR DATA FROM THE DESIR COHORT

S. Ramiro¹, D. van der Heijde¹, A. Sepriano¹, M. van Lunteren¹, A. Molto², P. Feydy², M.A. D'Agostino³, D. Loeuille⁴, M. Dougados², M. Rejnjerse¹, A. Claudepierre⁵. ¹Leiden University Medical Center, Leiden, Netherlands; ²Paris Descartes University; ³Université Versailles-Saint Quentin en Yvelines Boulogne-Billancourt, Paris; ⁴University of Nancy, Nancy; ⁵Université Paris Est Créteil, Créteil, France

Background: Spinal radiographic progression has been investigated in patients (pts) with r-axSpA, but not yet as thoroughly in early axSpA.

Objectives: To analyse the progression of spinal radiographic damage in pts with early axSpA.

Methods: Five-year follow-up data (baseline, 2 and 5 years) from the DESIR cohort, including pts with early axSpA, were used. Cervical and lumbar radiographs were centrally and independently scored by 3 readers (averaged scores), blind for chronological order and clinical characteristics, according to the mSASSS (0–72). Change scores for all available intervals were calculated. Pts were included if they had ≥1 mSASSS interval available (0–2 y, 2–5 y or 0–5 y). The development of new syndesmophytes (2 out of 3 readers) was calculated as a net change, i.e. subtracting the number of pts in whom an existing syndesmophyte ('noise') is no longer reported from those with a new syndesmophyte ('true progression'), divided by all pts. Two- and 5 year mSASSS progression and development of new syndesmophytes were assessed in each subgroup of pts according to the ASAS axSpA criteria and its arms at baseline (see figure 1). In addition, pts were grouped according to the fulfilment of mNYC and also to the presence of baseline syndesmophytes.

Results: In total, 549 pts (mean age 34 (SD 9) years, 46% males, 63% fulfilling ASAS axSpA criteria, baseline mSASSS 0.46 (1.54)) were included. Thirty-eight pts (7%) showed syndesmophytes at baseline, 42% of which were ASAS axSpA criteria negative. Mean mSASSS progression was 0.15 (0.94) at 2 years and 0.42 (1.77) at 5 years. 18% of the pts fulfilling the ASAS axSpA criteria showed a 5 year positive mSASSS change (>0), compared to 30% in those not fulfilling the criteria (figure 1). 26% of the pts fulfilling the imaging arm had a positive change: highest positive change in MRI-mNYC+ (34%), followed by MRI+mNYC+(29%) and lastly MRI+mNYC- (23%). Mean mSASSS progression was highest in the mNYC +MRI + group (1.34 (3.98)). Eleven percent of the pts fulfilling only the clinical arm of the ASAS criteria had a positive change in mSASSS at 5 years, mean change of 0.13 (0.65). Pts with baseline syndesmophytes (across all subgroups) had the highest progression: 2.69 (5.02) mSASSS-units. At 5 years, 7% of all pts had a net change of any new syndesmophyte; this was 6% for ASAS+pts, 9% for ASAS-, 10% for pts

fulfilling the imaging arm (18% for mNYC +MRI+) and 3% for pts fulfilling the clinical arm only. Seventeen percent of the mNYC +pts had a net change in new syndesmophytes as well as 42% of the pts with baseline syndesmophytes.

Abstract FRI0174 – Figure 1. Five-year mSASSS radiographic progression categories according to the subgroups of the ASAS criteria, arms of the ASAS criteria and fulfilment of mNYC at baseline.

The totals of some groups are higher than the sum of the subgroups due to missing data not allowing to classify patients into the subgroups.

Conclusions: Spinal radiographic progression, though limited in early axSpA, can be captured already at 2 years of follow-up. Progression is higher in pts fulfilling the mNYC and also in pts with baseline syndesmophytes. Almost half of the pts with early axSpA with a syndesmophyte at baseline develop further syndesmophytes over 5 years.

Disclosure of Interest: None declared

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FRI0175 RATES AND PREDICTORS OF RADIOGRAPHIC SACROILIITIS PROGRESSION AFTER CENTRAL READING IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS FROM THE ASAS COHORT: A 5-YEAR FOLLOW-UP STUDY

M. Protopopov¹, F. Proft¹, A. Sepriano^{2,3}, R. Landewé^{4,5}, D. van der Heijde³, J. Sieper¹, M. Rudwaleit⁶, D. Poddubnyy⁷. ¹Charité Universitätsmedizin Berlin, Berlin, Germany; ²NOVA Medical School, Universidade Nova de Lisboa, Lisboa, Portugal; ³Leiden University Medical Center, Leiden; ⁴Amsterdam Rheumatology and Clinical Immunology Center, Amsterdam; ⁵Zuyderland Medical Center, Heerlen, Netherlands; ⁶Klinikum Bielefeld Rosenhöhe, Bielefeld; ⁷German Rheumatism Research Centre, Berlin, Germany

Background: In patients with axial spondyloarthritis (axSpA), radiographic progression of sacroiliitis is relatively slow, with only few predictors identified. Recently, an analysis of data from Ankylosing Spondylitis Assessment Society (ASAS) Cohort, based on local assessment of X-Rays, revealed a surprisingly high rate of regression from radiographic axSpA (r-axSpA) to non-radiographic axSpA (nr-axSpA).

Objectives: To analyse the rates and predictors for radiographic progression of sacroiliitis in patients with axSpA from the ASAS Cohort, based on the central reading of radiographs.

Methods: Altogether 205 patients, who were included in the ASAS Cohort and diagnosed with axSpA by local rheumatologists, with baseline pelvic radiographs available for central reading, were included in the current study. Among them, 106 patients also had a pelvic radiograph at follow up (mean time to follow up 4.4±0.8 years). Images were independently assessed by 2 central readers (MP, FP), blinded for the chronology of the radiographs, according to the scoring system of the modified New York criteria (grade 0–4). In case of disagreement in classification (nr-axSpA or r-axSpA), the image was scored by an adjudicator (DP) that defined the final classification. In addition, we calculated a sacroiliitis sum score (0–8) based on scoring results of 2 (3) readers. The primary outcome was the proportion of patients with progression from nr-axSpA to r-axSpA at follow-up. Predictors of progression were investigated in univariable and multivariable logistic regression analyses.

Results: Among 205 patients, 82 (40%) were classified as nr-axSpA, and 123 (60%) as r-axSpA at baseline. Among 106 patients with available baseline and follow-up radiographs, 49 (46.2%) were classified as nr-axSpA, and 57 (53.7%) as r-axSpA at baseline. The agreement between two primary readers in classification (either nr-axSpA or r-axSpA) was moderate to substantial (κ=0.54 at baseline and