of anti-cN1A was also found in the context of infection in 7 (10.6%) patients and malignancy in 2 (3.0%) patients. Half of the patients (50.8%) patients were healthy individuals. No diagnosis of IBM or other myositis was made. Twenty-nine (44.6%) patients showed other antibodies specificities: anti-SSA/Ro52 (20%), anti-Ku (4.6%), anti-Mi-beta2 (4.6%) and anti-DSF70 (4.6%). In the SLE and SS groups, the most frequent presenting clinical features were sicca syndrome (66.7%), lymphopenia (9.2%), arthritis (6.1%) and photosensitivity (3.1%). No patient had signs or symptoms of muscular involvement.

Conclusion: Anti-cN1A was detected in diverse rheumatic conditions, but also in autoimmune thyroiditis and mostly in healthy individuals. SLE and SS were the most frequent systemic autoimmune rheumatic diseases associated with these antibodies. Contrary to expectations, no diagnosis of IBM or myositis was made. Further studies regarding the clinical significance of anti-cN1A are needed to attribute the real diagnostic value of this marker.

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AB1540 PREVALENCE AND DISTRIBUTION OF SONOGRAPHIC ELEMENTARY LESIONS IN PSA – RESULTS OF 2 COHORTS

Keywords: Imaging, Ultrasound, Psoriatic arthritis

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Background: Psoriatic arthritis (PsA) can manifest with different musculoskeletal (MSK) features. Ultrasound (US) optimizes the assessment of the different MSK features in PsA. However, there is no consensus on which MSK sonographic lesions and what locations should be evaluated by US.

Objectives: To examine the prevalence and distribution of key sonographic MSK lesions in patients with PsA.

Methods: This study included two prospectively recruited PsA cohorts. Cohort 1 included 158 consecutive PsA patients and cohort 2 included 94 patients with active PsA prior to initiation of therapy. All underwent a comprehensive US assessment, including both gray scale (GS) and power Doppler (PD) of 50 joints, 40 tendons and 14 entheses. The following sonographic lesions were assessed by two sonographers blinded to clinical data: I. Inflammatory lesions - Synovitis, tenosynovitis, peritenonitis and enthesitis and II. Structural lesions - erosions and bone proliferations. Presence/Absence of these lesions was determined based on previously suggested definitions by OMERACT (when available) or other publication and their prevalence by joint/tendon site was reported.

Results: In cohort 1, mean ± SD age was 52.7 ± 13 and 55.7% were females. In cohort 2, mean ± SD age was 47.5 ± 13.2 and 48.8% were females. The most prevalent locations of the inflammatory lesions in both cohorts were (Figure 1): Synovitis (small joints) – MCP2 (cohort 1: 11%, cohort 2: 27%), MCP 3 (cohort 1: 7%, cohort 2: 26%), IP1 (cohort 1: 5%, cohort 2: 25%) PIP 3 (cohort 1:3%, cohort 2: 16%), MTP 1 (cohort 1: 31%, cohort 2: 35%), MTP2 (cohort 1: 23%, cohort 2: 30%), MTP3 (cohort 1: 14%, cohort 2: 22%); Synovitis (medium-large joints) – wrist (cohort 1: 27%, cohort 2: 30%) and knee (cohort 1: 13%, cohort 2: 29%); tenosynovitis – 2nd finger flexors (cohort 1: 2%, cohort 2: 12%) 3rd finger flexor (cohort 1: 2%, cohort 2: 10%); extensor peritenonitis – MCP2 (cohort 1: 2%, cohort 2: 7%), MCP3 (cohort 1: 4%, cohort 2: 12%), PIP 3 (cohort 1: 3%, cohort 2: 13%), PIP4 (cohort 1: 2%, cohort 2: 12%); enthesitis – lateral epicondyle (cohort 1: 11%, cohort 2: 14%) and triceps (cohort 1: 7%, cohort 2: 20%); erosions – MCP1 (cohort 1: 4%, cohort 2: 5%), MCP2 (cohort 1: 6%, cohort 2: 7%), IP1 (cohort 1: 2%, cohort 2: 2%) PIP2 (cohort 1: 2%, cohort 2: 1%), MTP5 (cohort 2: 4%); bone proliferations – MCP1 (cohort 1: 12%, cohort 2: 7%), MCP2 (cohort 1: 10%, cohort 2: 17%), MCP3 (cohort 1: 5%, cohort 2: 17%), IP1 (cohort 1: 25%, cohort 2: 41%), PIP2 (cohort 1: 10%, cohort 2: 16%), PIP3 (cohort 1: 14%, cohort 2: 26%), DIP2 (cohort 1: 23%, cohort 2: 42%), DIP3 (cohort 1: 18%, cohort 2: 42%) and DIP5 (cohort 1: 29%, cohort 2: 49%).

Conclusion: This descriptive study provides comprehensive information on the most commonly affected sites for key inflammatory and structural domains in PsA. This information can inform efforts to develop reduced sonographic score to diagnose or monitor disease activity in PsA.

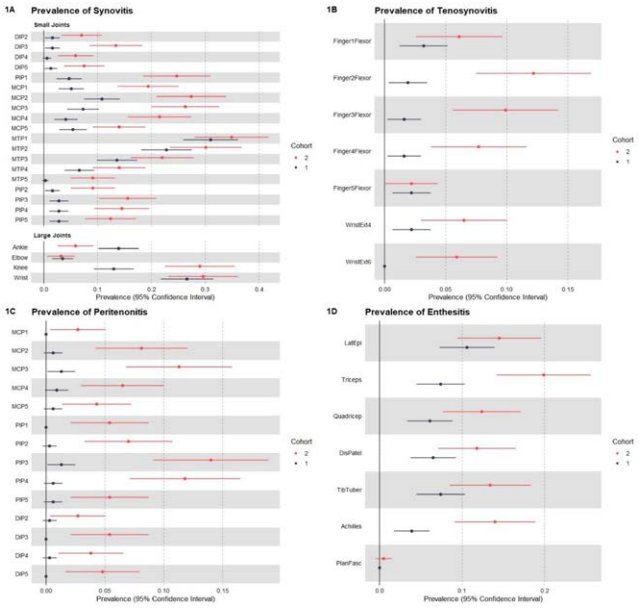

Figure 1. Prevalence and distribution of sonographic inflammatory lesions in PsA

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AB1541 THE INTENSITY OR DURATION OF INFLAMMATORY BACK PAIN HAS NO IMPACT ON THE DETECTION OF SACROILIITIS BY MAGNETIC RESONANCE IMAGING IN AXIAL SPONDYLOARTHRITIS

Keywords: Imaging, Spondyloarthritis

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Background: Sacroiliac joint (SIJ) magnetic resonance imaging (MRI) is an established tool in the evaluation of patients with axial spondyloarthritis (axSpA). In the validation study of the ASAS classification criteria for axSpA, only 63.1% of patients had sacroiliitis on the SIJ-MRI.[1] Studies that enrolled patients with axSpA based on expert opinion reported the sensitivity of MRI between 35 to 42% in detecting sacroiliitis.[2,3]

Objectives: This study aimed to evaluate the temporal relationship between ASAS defined positive MRI and the characteristics of low back pain (LBP) in axSpA.

Methods: Following axSpA groups were enrolled in the study whenever an attending physician ordered an SIJ-MRI. Patients fulfilling both the Rudwaleit criteria for inflammatory back pain (IBP) and Amor criteria, patients with a previous classification with either modified New York or ASAS classification criteria.[1] A blinded rheumatologist (GS) recorded the intensity and duration of IBP using a questionnaire before SIJ-MRI. MRI appointments were based on availability. Therefore some patients did not have IBP at acquisition. Two radiologists assessed SIJ-MRIs using the ASAS/OMERACT MRI group definition of active sacroiliitis.[4] In case of discrepant reporting, a third experienced radiologist (GE) adjudicated the SIJ-MRIs. The probability of axSpA is estimated using sum scores for SpA features excluding the SIJ-MRI.[5] The correlation between an ASAS-defined positive MRI and LBP characteristics was analyzed.

Results: Fifty-nine patients (32 F/27 M) were included. Patient characteristics are given in Table 1. Overall, 28 of 59 patients (47.5%) had a positive SIJ-MRI defined by ASAS.

The median duration of LBP was 15 (43) days and the highest intensity of LBP was felt 6.5 ± 1.2 days before the MRI appointment. At acqusition, 13 (22.0%) patients reported no LBP. There was no significant difference between the presence of LBP within 10 days prior to MRI and sacroiliitis on MRI. (p=0.6) (Sacroiliitis in 45.7% with, and 53.8% without LBP) In LBP reporting patients, pain duration and pain VAS score were 3.3 ±2.3 and 7.1 ±1.9 in patients with sacroiliitis, and 8.7 ±3.6 and 6.8 ±1.7 in patients without sacroiliitis on MRI, respectively. (p=0.48, p=0.10) Age, sex, BASDAI, CRP and calculated probability of axSpA had no correlation with the presence of sacroiliitis on MRI. Adding sacroiliitis on SIJ-MRI to axSpA probability score increased the rate of patients with a probability of >90% for axSpA from 71.2 to 83.1% but the rate of sacroiliitis on MRI was similar in all probability groups.

Conclusion: These results suggest that the presence of LBP and the duration of intense pain do not affect the detected rate of sacroiliitis on SIJ-MRI in axSPA. The low prevalence of sacroiliitis in this study population implies its value as a classification tool. Further studies with larger sample sizes are needed to clarify the factors affecting the SIJ-MRI findings in axSpA patients.

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Table 1. The characteristics of the study population

Age, years, mean ± SD	40.2 ± 10.5
BASDAI, mean ± SD	3.7 ± 2.5
Patient groups, n (%)	27 (45.8)
Classified as axSpA with Amor criteria	17 (28.8)
Previously classified as nr-axSpA with ASAS criteria	15 (25.4)
Previously classified as AS with mNY criteria	
SpA related features, n (%)	14 (23.7)
Arthritis	28 (47.5)
Enthesitis	6 (10.2)
Uveitis	24 (40.7)
Family history of SpA	57 (96.6)
Good response to NSAID	28 (47.4)
HLAB27 positivity*	26 (44.1)
CRP positivity	
Probability of axSpA using sum scores[5] (MRI not included)	42 (71.2)
>51 (Probability >90%)	7 (11.9)
44-51 (Probability >80%)	10 (16.9)
13-43	0
<13 (Probability <15%)	

AS, ankylosing spondylitis; mNY, modified New York; nr-axSpA, nonradiographic axial spondyloarthritis;*9 patients have no available HLAB27 result.

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AB1542 APPLICATION OF THE OMERACT ULTRASOUND SCORING SYSTEM FOR SALIVARY GLANDS IN PATIENTS WITH SUSPECTED SJÖGREN'S SYNDROME

Keywords: Sjögren syndrome, Imaging, Ultrasound

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Background: Primary Sjogren's Syndrome (pSS) is a connective tissue disease characterized by the presence of sicca syndrome. Confirmation of pSS requires immunological test and biopsy of the accessory salivary glands[1]. Salivary gland ultrasonography (SGUS) allows the detection of structural changes of salivary glands and is proposed as a reliable tool to assess involvement of major salivary glands in patients with pSS. Recently, a new semi- quantitative score have been validated by experts: The OMERACT US score to assess salivary gland involvement in pSS [2].

Objectives: The aim of our study was to describe salivary gland involvement in patient with suspected of pSS according to the OMERACT ultrasound scoring system for pSS.

Methods: All patients referred for a suspicion of pSS during the last period june 2022-2023 were enrolled. All underwent measurement of salivary flow, minor salivary gland biopsy, SSA antibody. SGUS was performed for all included patients. Both parotid glands and submandibular glands were exanimated using the scoring system 0-3 (OMERACT). Exact Fischer test was used to compare qualitative variables. Sensitivity, specificity and cutoffs were determined by ROC curve analysis.

Results: We enrolled 73 patients with a suspected pSS. Women represented 80 % of the cohort. Median age was 59 years [Q1 52-Q3 65]. Thirty-four patients were diagnosed with primary SS (pSS) and all fulfilled the 2016 American College of Rheumatology (ACR)/EULAR classification criteria. Thirty-one (91%) patients with pSS had a focus score > 1 in the biopsy of minor salivary gland. Twenty-one (62%) of patients with pSS had a positive SSA antibody. Of the 73 patients, 26 (35%) patients had at least one gland with an ultrasound score of 2 among them, 21 patients were diagnosed with pSS. More patients with pSS compared with non-pSS had score ≥2 in at least one gland (21 pSS vs 5 non pSS) in at least one gland. Among the 26 patients with an ultrasonographic score ≥ 2, 14 patients had positive SSA antibody (p= 0.001). When using ROC analysis, we found that an ultrasound score cutoff ≥2 in at least one gland was associated with a sensitivity at 67 % and specificity at 88%, air under the curve (AUC) was 0.83 [IC95% 0.732-0.93].

Conclusion: More patients with pSS compared with non-pSS had score ≥2 in at least one gland (21 pSS vs 5 non pSS) in at least one gland. An ultrasound cutoff > 1 is associated with a sensitivity at 67 % and Specificity at 88%. Our data supports what have been previously reported in several studies. Fana et al [3] reported in a cohort of 143 patients with suspected pSS that the best ultrasound cutoff value was ≥ 1 gland with a score ≥2 was associated to sensitivity at 72 % and specificity of 91%. Our data supports the importance of use of ultrasound as tool for diagnosing pSS. SGUS should be integrated as a criterion in ACR/EULAR score.

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AB1543 POSITIVE MRI OF THE SPINE AS IMAGING CRITERION FOR DIAGNOSIS OF AXIAL PSORIATIC ARTHRITIS

Keywords: Psoriatic arthritis, Spondyloarthritis, Imaging

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Background: MRI is essential for axial spondyloarthritis (axSpA) diagnosis. A positive MRI in the ASAS classification criteria of axSpA is based on inflammatory lesions in the sacroiliac joints. These lesions are defined as one bone marrow edema (BME) highly suggestive of axSpA present on ≥ 2 consecutive slices or ≥ 2 BME A on a single slice. The addition of MRI of the spine as an imaging criterion to the ASAS axSpA criteria had a low yield of newly classified patients and is therefore not recommended. Axial psoriatic arthritis (axPsA) remains poorly defined despite its high prevalence among patients with PsA. Studies comparing axPsA with other axSpA, such as Anquilosing Spondylitis (AS), have found differences in the former, including more frequent asymmetric spine and SIJ involvement, cervical involvement, and isolated spondylitis.

Objectives: Describe the presence of inflammatory and structural lesions on MRI-spine and SIJ in patients with psoriasis. Evaluate the added value of spinal inflammatory lesions on MRI-spine and structural lesions on MRI-SIJ as imaging criterion for axPsA diagnosis.

Methods: We performed a retrospective study of patients with psoriasis with at least a whole spine and sacroiliac joints (SIJ) MRI performed at Universidad de Chile Clinical Hospital between January 2015 and December 2021. MRI were performed in a 1.5 T machine, following a non-contrast protocol. Sagittal T1-weighted (T1w) and T2-weighted fat-suppressed fast spin echo sequences were available for the spine, while semi-coronal T1w and short inversion recovery sequences for the SIJ. Structural and inflammatory lesions were defined according to the ASAS/OMERACT definitions. Results are presented as mean and SD or numbers and percentages.

Results: 34 patients with psoriasis were analyzed, 17 (50%) were male, and the mean age at the time the MRI was performed was 43.7 ± 10.6 years. The