Psoriatic arthritis (PsA) is a systemic chronic inflammatory disease, which leads to irreversible destruction of the joints. Multiple factors drive the development of this heterogeneous disease including genetic predisposition, environmental triggers, and immunologic dysfunction. Even structural damage differs significantly between patients, with a subset of patients suffering from severe and rapid (rheumatoid arthritis-like) bone destruction (arthrosis mutilans), while others experience only modest signs of bone damage, or develop new bone formation. 

**Objectives:** The study aims to identify potential predictors for radiographic such as clinical, radiographic, and laboratory parameters.

**Methods:** In this retrospective data analysis 231 patients with PsA and at least two available x-rays were included. Radiographs were scored according to Sharp-van-der-Heijde-total Score (mSvdHTH) modified for PsA and a mean annual progression (MAP) rate was calculated by dividing the change in mSvdHTS between two x-rays number of years between them. For each patient, the median of the annual progression rates was calculated. Patients were grouped in no progressors (MAP ≤ 0.5), low progressors (MAP 0.5 < MAP ≤ 2.5) and high progressors (MAP > 2.5). Clinical data such as the clinical disease activity index (CDAI), radiographic data and laboratory data (CRP, ESR, C-terminal Telopeptide) were analysed for their predictive value of radiographic progression using parametric and non-parametric statistical analysis according to the distribution of data. For correlation analysis Spearman’s rank coefficient was used. For group analysis ANOVA was used. Dichotomous variables such as gender or nail involvement were analysed using z²-test. Multiple linear regression analysis was used to identify factors influencing radiographic progression.

**Results:** The mean baseline mSvdHTS in high progressors was 41.59 (43.53), 19.89 (34.93) in low progressors and 16.25 (26.77) in non-progressors. Baseline mSvdHTS was significantly correlated with MAP (p=0.27, p=0.002) rate. Group analysis comparing clinical and laboratory parameters in patients showed significant differences in the baseline mSvdHTS. The high progression cohort also exhibits greater mean CRP, ESR, CDAI, median first year CDAI, TJC68, SJC66 and a higher percentage of nail involvement than low- or non-progressors but no statistically significant result was found. In a multiple linear regression analysis baseline SvdHS (β = 0.51, 95% CI 0.28-0.73, p<0.001), median CDAI in the first year after baseline (β = 0.51, 95% CI 0.19-0.83, p=0.018) and CDAI at baseline (β = -0.62, 95% CI -1.05 – -0.19, p=0.043) were significantly associated with mean annual progression. No association was found between MAP and bone turnover markers.

**Conclusion:** This study shows a clear association of Sharp-van-der-Heijde score at baseline with future radiographic progression. Moreover, the median CDAI in the first year after baseline was associated with radiographic progression.

**Background:** Several studies have reported a higher prevalence of obesity in Psoriatic Arthritis (PsA) [1]. Obesity may lead to more weight on the joints, namely on the ankle/foot joints, altered mechanics, and repetitive micro-trauma. Foot involvement is common in PsA, including arthritis, dactylitis, and Achilles enthesitis. Obesity has been found to be associated with higher disease activity and worse functionality scores in PsA patients. 

**Objectives:** The purpose of this study was to evaluate the role of obesity in foot involvement in PsA patients.

**Methods:** A retrospective study including patients with PsA (all patients fulfill CASPAR criteria) followed from January to May 2022, from a Rheumatology Clinic. Patients were divided into two groups: with current or previous foot involvement (assessed clinically or by ultrasound) (group 1) and without current or previous foot involvement (group 2). Sociodemographic, clinical and laboratory data were collected. Obesity was defined as a body mass index greater than or equal to 30 Kg/m² and multimorbidity was defined as 2 or more comorbidities. Descriptive analysis was performed using means and standard deviation (SD), medians and Interquartile range (IQR) for continuous data, and frequencies and percentages for qualitative variables. Clinical, laboratory and radiological findings were compared between patients with and without foot involvement using parametric and non-parametric tests, with a p-value ≤ 0.05.

**Results:** A total of 154 patients were enrolled (mean age of 57.08 ±11.54 years and 39.6% were women). Foot involvement was found in 110 patients (71.40%). Obesity was more prevalent among patients with foot involvement – group 1 (40.90% VS 13.64%; p<0.001). Enthesitis was found in 35.10 % of patients with Achilles enthesitis (28%) as the most frequent manifestation. PsA patients in group 1 who were obese had higher prevalence of Achilles enthesis (p=0.01). 18.18% of patients had current/previous toe dactylitis and dystrophic nails were found in 37.7% of patients (no differences were encountered between obese and non-obese patients). Multimorbidity were more frequent in PsA patients with foot involvement- group 1 (p=0.04). We found a higher frequency of extra-articular manifestations and higher HAQ disability index values in patients with foot involvement (p=0.03 and p=0.001, respectively). Although we did not find statistically significant differences in the HAQ disability index between obese and non-obese patients with foot involvement, there was a predominance of disability in obese patients. PsA patients in group 1 who are obese have higher C-reactive protein (p=0.01) and higher consumption of non-steroidal anti-inflammatory drugs (p=0.02). We did not find statistically significant differences in swollen and tender joint counts, in conventional and biological DMARDs between obese and non-obese patients in group 1.

**Conclusion:** Obesity was more prevalent among PsA patients with foot involvement, suggesting its presence may enhance and contribute for foot complaints in these patients. Patients with foot involvement had higher HAQ disability index levels, reflecting the negative impact of foot involvement in daily functionality in these patients. Our study highlights the importance of obesity management in PsA patients with foot involvement. Further studies are needed to develop weight reduction strategies that can be applied in clinical practice, in order to improve outcomes related to PsA.

**Background:** miRNAs are known to play key roles in the development of this heterogeneous disease including genetic predisposition, environmental triggers, and immunologic dysfunction. Even structural damage differs significantly between patients, with a subset of patients suffering from severe and rapid (rheumatoid arthritis-like) bone destruction (arthrosis mutilans), while others experience only modest signs of bone damage, or develop new bone formation. 

**Objectives:** The study aims to identify potential predictors for radiographic such as clinical, radiographic, and laboratory parameters.

**Methods:** In this retrospective data analysis 231 patients with PsA and at least two available x-rays were included. Radiographs were scored according to Sharp-van-der-Heijde-total Score (mSvdHTH) modified for PsA and a mean annual progression (MAP) rate was calculated by dividing the change in mSvdHTS between two x-rays number of years between them. For each patient, the median of the annual progression rates was calculated. Patients were grouped in no progressors (MAP ≤ 0.5), low progressors (MAP 0.5 < MAP ≤ 2.5) and high progressors (MAP > 2.5). Clinical data such as the clinical disease activity index (CDAI), radiographic data and laboratory data (CRP, ESR, C-terminal Telopeptide) were analysed for their predictive value of radiographic progression using parametric and non-parametric statistical analysis according to the distribution of data. For correlation analysis Spearman’s rank coefficient was used. For group analysis ANOVA was used. Dichotomous variables such as gender or nail involvement were analysed using z²-test. Multiple linear regression analysis was used to identify factors influencing radiographic progression.

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**Conclusion:** This study shows a clear association of Sharp-van-der-Heijde score at baseline with future radiographic progression. Moreover, the median CDAI in the first year after baseline was associated with radiographic progression.

**Background:** Psoriatic arthritis (PsA) is a heterogeneous inflammatory rheumatologic disease associated with psoriasis. The etiopathogenesis of PsA has not been fully elucidated. Although activity scores are used in the follow-up of patients, reliable biomarkers are not yet available. MicroRNAs (miRNA) are non-coding RNA oligonucleotides whose cellular expression levels change in inflammatory and autoimmune diseases and provide gene expression regulation. miRNAs are being investigated for their potential biomarker properties in the diagnosis and follow-up of psoriatic arthritis. 

**Objectives:** In this context, the current study aimed to determine the changes in miR-10b expression level in patients with PsA who have remission/low disease activity according to DAPSA score and in age-sex matched healthy population.
Methods: Ethics committee approval was obtained from Sakarya University Ethics Committee for the study (E-71522473-050.01.04-15102135). RNA isolation, cDNA synthesis and RT-PCR analysis were performed in 3 PsA patients (19 Females and 11 Males) and age/sex matched control group (20 Females and 11 Males) with DAPSA scores in remission or low disease activity, who applied to Sakarya University Internal Medicine Rheumatology Clinic between January 2019 and February 21, m-R-10b expression levels. U6 was used as internal control. IBM SPSS Statistics 26 program was used for statistical analysis.

Results: The mean age of the patients with psoriatic arthritis was 47.4±13.4, and the control group was 46.6±12.9 (p=0.78). No gender difference was analyzed between the two groups. (p=0.92). In addition, it was analyzed that the m-R-10b expression level was 0.90-fold in PsA patients compared to the control group, and the expression level did not change significantly compared to the control group (p=0.53).

Conclusion: In our study, no statistically significant difference was observed in terms of miR-10b expression in PsA patients with DAPSA remission-low disease activity when compared to healthy controls. Further studies are needed in patients with moderate and high activity psoriatic arthritis.

"The study was supported by the 2209-A Tubitak Student Project (1919B012101025).

REFERENCES:


Acknowledgements: NIL.

Disclosure of Interests: Şevval Sultán Kıkşal Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Zeynep Öztürk Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Umut ALKURT Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Damla Karatas Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Gamze GÜNEY ESKİLER Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Erdem COŞKLUK Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Asuman Deveci Özkaya2, T. Ergun3, S. Kutluç Açkıran1, A. Aliyeva1, G. Sevik1, P. Atagündüz1. The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Umut ALKURT Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Damla Karatas Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Gamze GÜNEY ESKİLER Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Erdem COŞKLUK Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Asuman Deveci Özkaya2, T. Ergun3, S. Kutluç Açkıran1, A. Aliyeva1, G. Sevik1, P. Atagündüz1. The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Gamze GÜNEY ESKİLER Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Asuman Deveci Özkaya2, T. Ergun3, S. Kutluç Açkıran1, A. Aliyeva1, G. Sevik1, P. Atagündüz1. The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Gamze GÜNEY ESKİLER Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Asuman Deveci Özkaya2, T. Ergun3, S. Kutluç Açkıran1, A. Aliyeva1, G. Sevik1, P. Atagündüz1. The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Gamze GÜNEY ESKİLER Grant/research support from: The study was supported by the 2209-A Tubitak(Student and Technological Research Council of Turkey) Student Project (1919B012101025), Asuman Deveci Özkaya2, T. Ergun3, S. Kutluç Açkıran1, A. Aliyeva1, G. Sevik1, P. Atagündüz1.

Table 1 - Comparison of PsA patients with and without sSS

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Presence of sSS</th>
<th>Absence of sSS</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age mean (SD)</td>
<td>53.9</td>
<td>48.4</td>
<td>0.09</td>
</tr>
<tr>
<td>Female/Male ratio</td>
<td>18/2</td>
<td>61/27</td>
<td>0.08</td>
</tr>
<tr>
<td>Age of onset of skin involvements mean (SD)</td>
<td>30.6</td>
<td>29.4</td>
<td>0.74</td>
</tr>
<tr>
<td>Age of onset of joint involvements mean (SD)</td>
<td>42.6</td>
<td>37.4</td>
<td>0.09</td>
</tr>
<tr>
<td>Axial Involvement n (%)</td>
<td>6 (35.3)</td>
<td>29 (24.7)</td>
<td>0.77</td>
</tr>
<tr>
<td>Polyarthropathy n (%)</td>
<td>4 (22.2)</td>
<td>11 (14.3)</td>
<td>0.29</td>
</tr>
<tr>
<td>Heel Enthesitis n (%)</td>
<td>5 (31.3)</td>
<td>12 (14.3)</td>
<td>0.19</td>
</tr>
<tr>
<td>Planter Fasciitis n (%)</td>
<td>5 (31.3)</td>
<td>6 (9)</td>
<td>0.03</td>
</tr>
<tr>
<td>RF positivity n (%)</td>
<td>1 (7.7)</td>
<td>1 (1.9)</td>
<td>0.36</td>
</tr>
<tr>
<td>ANA positivity n (%)</td>
<td>10 (55.6)</td>
<td>12 (27.2)</td>
<td>0.04</td>
</tr>
<tr>
<td>Biological therapy ever n (%)</td>
<td>10 (50)</td>
<td>63 (72.4)</td>
<td>0.06</td>
</tr>
</tbody>
</table>

sSS: Secondary Sjogren's syndrome, SD: Standard deviation, RF: Rheumatoid Factor, ANA: Anti-Nuclear Antibody, PsA: Psoriatic Arthritis

Acknowledgements: NIL.

Disclosure of Interests: None Declared.

DOI: 10.1136/annrheumdis-2023-eular.6396

PREVALENCEN OF SECONDARY SJÖGREN'S SYNDROME IN PSORIASIS AND PSORIATIC ARTHRITIS AND ITS RELATIONSHIP WITH DISEASE CHARACTERISTICS

Keywords: Sjögren syndrome, Psoriatic arthritis

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Background: Secondary Sjögren's syndrome (sSS) accompanies many systemic rheumatic diseases at certain rates, including axial spondyloarthritis (axSpA).[1] There are some case reports in which psoriasis or psoriatic arthritis (PsA) with sSS co-existence.[2] However, the prevalence of sSS in psoriasis (PsO) and PsA is not fully addressed. Additionally, clinical and laboratory features that may be associated with sSS, and whether arthritis and sSS are related are not known.