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**References:**


**Table 1. Significant Predictors of Change in Pain (W24 and W52)**

<table>
<thead>
<tr>
<th>BL Determinant</th>
<th>W24</th>
<th>W52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain score</td>
<td>-0.62 (0.69-0.55)</td>
<td>-0.75 (0.83-0.67)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>-0.38 (0.50-0.27)</td>
<td>-0.37 (0.53-0.25)</td>
</tr>
<tr>
<td>SF-36 MCS</td>
<td>0.20 (0.11-0.30)</td>
<td>0.11 (-0.02-0.24)</td>
</tr>
<tr>
<td>TJC</td>
<td>0.13 (0.06-0.19)</td>
<td>0.12 (0.04-0.21)</td>
</tr>
<tr>
<td>NSAID use (Y vs N)</td>
<td>2.29 (0.32-0.96)</td>
<td>2.78 (0.55-9.48)</td>
</tr>
</tbody>
</table>

**POS0171**

**18F-fluorodeoxyglucose PET-CT scans visualize both axial and peripheral bone formation in psoriatic arthritis patients**

J de Jongh, H. Hermke, G. C. J. Zwerenijnen, M. Yaquid, I. Van der Horst-Bruinsma, M. G. H. Van de Sande, A. Van Kuijk, I. Bulsink, L. Burgemeister, N. V. Van Dillen, A. Vokshy, C. J. Van der Laken, Amsterdam UMC, location VUMc, Rheumatology & Clinical Immunology, Amsterdam, Netherlands; Amsterdam UMC, location AMC, Radiology & Nuclear Medicine, Amsterdam, Netherlands; Amsterdam UMC, location AMC, Rheumatology & Clinical Immunology, Amsterdam, Netherlands; Reade, Rheumatology, Amsterdam, Netherlands.

**Background:** Psoriatic arthritis (PsA) can present with peripheral (i.e. arthritis, enthesitis, dactylitis) and/or axial (spondyloarthritis) manifestations. Positron Emission Tomography (PET) may be a promising imaging technique for detection of whole body disease activity since it combines quantification and picomolar sensitivity for accurate depiction of pathologic processes with anatomical low dose CT imaging as a reference (3, 4). It was recently demonstrated that [18F]Fluorodeoxyglucose PET-CT scans can successfully visualize and monitor ankylosing spondylitis disease activity by imaging of bone formation in the cervical spine and the sacroiliac joint (5). Since bone formation is associated with enthesal synovitis in PsA, [18F]Fluorodeoxyglucose may enable sensitive, whole body detection of disease activity in PsA.

**Objectives:** To investigate the feasibility of [18F]Fluorodeoxyglucose PET-CT to visualize disease activity of PsA by imaging of bone formation at axial and peripheral sites in PsA patients.

**Methods:** Sixteen patients (female 10/16, age 50.6 ± 8.9 years) with PsA fulfilling CASPAR criteria and clinically active disease including ≥1 clinically active enthesitis site were included. Clinical disease activity was assessed by swollen joint count/tender joint count 44, MASES and SPARCC. Of each patient, a whole body [18F]Fluorodeoxyglucose PET-CT scan at 45 minutes post injection was performed. All scans were dichotomously scored by two board certified readers (blinded for clinical data) for PET-positive lesions in the joints, peripheral enthesis sites and spine. Low dose CT was used for anatomical reference.

**Results:** Out of 1088 evaluated joints, 109 joints showed PET enhancement, most frequently in the interphalangeal- and metatarsal joints of the feet (144/109, 12.0%) (Figure 1A) and the distal interphalangeal joints of the hands (144/109, 12.0%). Out of 416 evaluated enthesal sites, PET positivity was found at 44 sites, mainly located at the patella tendon insertion (11/44, 25%) (Figure 1B) and the quadriceps tendon insertion (10/44, 22.7%). Of the PET positive joints and entheses sites, respectively 81.1% and 70.5% were not associated with tender or swollen joints and clinical enthesitis, respectively. In 11 out of the 16 patients ≥1 axial PET positive lesion was observed (Figure 1C), most frequently located in the cervical spine (10/16 observed axial lesions, 62.5%). Two patients showed PET enhancement in one sacroiliac joint (SIJ) without any inflammatory back pain (IBP). Only four out of 15 patients reported IBP and missing data for 1 patient. In two patients clinical dactylitis was observed which was also depicted on PET-CT.

Disclosure of Interests: none

**REFERENCES:**


Conclusion: 18F-fluoride PET-CT scans can visualize disease activity at whole body musculoskeletal manifestations of PsA by demonstrating local bone formation at active sites. 18F-fluoride PET-CT adds information to clinical disease activity, reflected by a high number of clinically negative, PET positive sites on top of concordant findings.

REFERENCES:

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Disclosure of Interests: None declared


POS1073 INCREASED NUMBER OF COMORBIDITIES AND CARDIOVASCULAR RISK FACTORS IN EARLY PSORIATIC ARTHRITIS PATIENTS SUGGESTS AN INTRINSIC DISEASE IMPACT

A. Ischenko1,2, S. Pazmino1,3, K. De Vlam1,2, R. Lories1,3. 1University Hospitals Leuven, Department of Rheumatology, Leuven, Belgium; 2Ziekenhuis Netwerk Antwerpen, Department of Rheumatology, Antwerpen, Belgium; 3KU Leuven, Skeletal Biology and Engineering Research Centre, Department of Development and Regeneration, Leuven, Belgium

Background: Metabolic and cardiovascular comorbidities in psoriatic arthritis (PsA) are seen as a consequence of long-lasting inflammation. Patients with PsA develop metabolic and cardiovascular comorbidities over the course of time. PsA patients have a higher burden of comorbidities and cardiovascular risk factors (CV RF) as compared to those with other forms of arthritis. Despite a lower grade of systemic inflammation as measured by CRP, the nature of this increased prevalence in PsA is not fully understood. We hypothesize that the risks may be intrinsic to the disease, and be already present in early stages.

Objectives: The aim of this study was to investigate the presence of comorbidities and CV RF in treatment naïve Early PsA (EPA) as compared to sex- and age-matched healthy volunteers and to study factors contributing to the metabolic burden of the patients.

Methods: Clinical, demographic characteristics, cardiovascular risk factors and comorbidities of newly diagnosed treatment-naïve adult patients with PsA compared to sex- and age-matched controls were studied in an observational prospective longitudinal multicentre study.

Results: Sixty-seven EPA patients were matched to 61 healthy volunteers. At diagnosis, 73% of EPA had oligoarticular and 22% polyarticular disease. Majority had mild PASI scores (median PASI 1.2). The median duration of skin psoriasis before the onset of PsA was 11.4 years. Symptom duration at onset of PsA was 0.6 years.

Disclosure of Interests: None declared


POS1072 OBESEITY AND LOWER LIKELIHOOD OF ACHIEVING MINIMAL DISEASE ACTIVITY AND REMISSION IN PSORIATIC ARTHRITIS PATIENTS

E. Vallesjo-Yaqüe1, T. Burkard2, B. Moeller3, A. M. Burden4. 1ETH Zurich, Department of Chemistry and Applied Biosciences, Institute of Pharmaceutical Sciences, Zürich, Switzerland; 2Inselspital, University Hospital of Bern, Rheumatology, Immunology and Allergy, Bern, Switzerland

Background: Among patients with psoriatic arthritis (PsA), obesity is a common comorbidity, and it is associated with diffculted disease management. This may be explained by the understanding of obesity as a low-grade inflammatory disease, which shares pathological pathway with PsA.

Objectives: We aimed to assess the impact of elevated body mass index (BMI) on the achievement of successful clinical outcomes in PsA patients within one year after starting their first biologic or targeted synthetic disease-modifying anti-rheumatic drug (b/tsDMARD).

Methods: This observational cohort study was performed using data from the Swiss Clinical Quality Management in Rheumatic Diseases (SCQM) registry (from 1997 to July 31 2019), and it included adult PsA patients starting their first b/tsDMARD. Patients were classified according to their BMI as normal weight (BMI <25), overweight (BMI 25.0-29.9), and obese (BMI ≥30). Overweight and obese patients were compared to the normal weight group (reference group).

Results: The study included 306 (39.53%) normal weight, 285 (36.82%) overweight, and 183 (23.64%) obese patients. Compared to the normal weight group, obese patients had lower odds of achieving MDA at 12-months (Adjusted odds ratio [ORAdj] 0.45, 95% confidence interval [CI] 0.24-0.82). This was consistent with the observed reduced odds of achieving DAPSA remission (ORAdj 0.42, 95%CI 0.21-0.85), clinical DAPSA remission (ORAdj 0.51, 95%CI 0.27-0.96), and DAPSA remission remission (ORAdj 0.51, 95%CI 0.32-0.81) in obese vs normal weight patients. No differences were observed in treatment persistence across the BMI strata. And there was high overlap between achievement of MDA and clinical DAPSA remission.

Disclosure of Interests: None declared