rheumatologic conditions including Psoriatic Arthritis (PsA), enthesopathy can be a consequence of several clinical conditions including metabolic syndrome, mechanical injuries and degeneration.

Objectives: To evaluate the effect of body mass index (BMI) on disease activity scores and enthesitis scores in Psoriatic Arthritis.

Methods: Retrospective study including all the patients with PsA meeting the CASPAR criteria, beginning first-line biologic therapy at our centre. Demographic and clinical data were collected from the Portuguese database Reumapt. Statistical analysis was performed with SPSS. Continuous variables were compared through Spearman/Pearson correlations.

Results: The mean BMI was 26.8 (SD 0.5). In our sample of 119 PsA patients, 21.5% were overweight and 8.3% were obese. The mean age of patients was 46.3 ± 1.03 years; 60 female and 59 male. The median disease duration was 6.8 (0.3-33.8) years. At baseline mean (SD) disease activity variables were: DAS 28 4vESR 4.9 (0.2), ESR 33.2 (2.3) mm/h; CRP 2.35 (0.3) mg/dL, BASDAI 6.6 (0.2), ASDAS 3.9 (0.1), BASMI 3.7 (0.2), BASFI 5.8 (0.3), MASES 1.9 (0.3), SPARCC 2.3 (0.3). There were statistically significant positive correlations between BMI and MASES at baseline ($p=0.024$, $r=0.411$) but there weren't with SPARCC, DAS 28 4vESR, ESR, CRP, BASDAI, ASDAS, BASMI and BASFI.

Conclusion: The data showed that patients with higher BMI values had higher enthesitis scores suggesting that overweight/obesity may have a negative impact on enthesopathy. Further studies are still needed to further understand that possible relationship.

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Disclosure of Interests: Sara Ganhão: None declared, Bruno Miguel Fernandes: None declared, Salomé Garcia: None declared, Filipe Pinheiro: None declared, Maria Rato: None declared, Eva Mariz: None declared, Miguel Bernardes Speakers bureau: Abbvie, Amgen, Biogen, Eli-Lilly, Glaxo-Smith-Kline, Pfizer, Janssen, Novartis, Lúcia Costa: None declared

DOI: 10.1136/annrheumdis-2020-eular.4567

AB0770

DESCRIBING A COHORT OF PATIENTS WITH PSORIATIC ARTHRITIS ACCORDING TO THE BODY MASS INDEX: EXPERIENCE IN A JOINT RHEUMATOLOGY-DERMATOLOGY CLINIC

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Background: Obesity is a predictor for the development of psoriatic arthritis (PsA) with a negative prognostic impact.

Objectives: We aimed to describe and characterize patients with PsA according to the Body Mass Index (BMI) in a joint Rheumatology-Dermatology unit (PAIDER).

Methods: We retrospectively reviewed patients diagnosed with PsA according to CASPAR criteria visited between May 2012 and May 2019 at the PAIDER clinic of our center. Data on demographic and anthropometric features, serologic findings, source of referral, cardiovascular risk factors and biological treatment were collected from clinical records. Patients were classified according to the WHO International Classification of nutritional status in normal weight (BMI 18.5-24.9 Kg/m²), overweight (BMI 25-29.9 Kg/m²) and obesity (BMI ≥30 Kg/m²). A descriptive analysis was performed, and the differences between groups were evaluated using Chi², T-Student and ANOVA tests. P-values <0.05 were accepted as significant.

Table 1.

Baseline characteristics	Total n=393
Female, n (%)	199 (50,6)
Age, yrs, mean ±SD	52,47 (13,21)
Source of referral, n (%)	
Dermatology	117 (29,8)
Rheumatology	219 (55,7)
Primary Care and Others	22 (5,6)
Smoker, n (%)	97 (25,8)
High Blood Pressure (HBP), n (%)	106 (27,7)
Diabetes, n (%)	48 (12,5)
Hypercholesterolemia, n (%)	98 (25,8)
Hyperuricemia, n (%)	32 (8,6)
HLA-B27 positive, n (%)	68 (21,6)
BMI, Kg/m ² , mean ±SD	28,15 (5,87)
Biological treatment, n (%)	166 (43,2)

Table 2.

Characteristics according to BMI	Normal weight n= 118	Overweight n= 112	Obesity n=118	P value
Female, n (%)	66 (55,9)	52 (46,4)	62 (52,5)	ns
Age, yrs, mean ±SD	47,92 (14,08)	54,71 (11,75)	54,48 (11,54)	<0,001
Source of referral, n (%)				Ns
Dermatology	35 (33,7)	37 (35,2)	34 (30,9)	
Rheumatology	63 (60,6)	61 (58,1)	70 (63,6)	
Primary Care and Others	6 (5,8)	7 (6,7)	6 (5,5)	
Smoker, n (%)	37 (33)	23 (21,1)	31 (26,7)	ns
High Blood Pressure (HBP), n (%)	12 (10,5)	37 (34,3)	41 (35)	<0,001
Diabetes, n (%)	7 (6)	9 (8,3)	30 (25,6)	<0,001
Hypercholesterolemia, n (%)	19 (17)	24 (22,2)	45 (38,5)	0,001
Hyperuricemia, n (%)	5 (4,4)	7 (6,8)	19 (16,7)	0,004
HLA-B27, n (%)	27 (28,7)	17 (17,9)	13 (12,6)	0,016
BMI, Kg/m ² , media ±DE	22,58 (1,78)	27,46 (1,55)	34,42 (5,08)	-
Biological treatment, n (%)	47 (41,2)	45 (40,9)	66 (55,9)	0,032

Results: During the study period 393 patients (50.6% women) with a mean age of 52.47 ± 13.21 years were evaluated. Baseline characteristics are shown in table 1.

The mean BMI was 28.15 ± 5.87 kg/m². 112 patients (32%) were overweight with a mean BMI of 27.46 ± 1.55 kg/m² and 118 patients (34%) were obese with a mean BMI of 34.42 ± 5.08 kg/m². Of the obese patients, 80 (67.8%) had obesity grade 1, 28 (23.7%) grade 2 and 10 (8.5%) grade 3.

Characteristics of the patients according to BMI categories are shown in Table 2. We observed that mean age was significantly higher in obese patients ($p < 0.001$), as well as the prevalence of cardiovascular risk factors such as HBP ($p < 0.001$), Diabetes ($p < 0.001$), dyslipidemia ($p = 0.001$) and hyperuricemia ($p = 0.004$). Obese patients also received more biological therapy ($p=0.032$). A higher prevalence of HLA-B27 was observed in patients with normal weight ($p=0.016$). No differences were found according to BMI regarding gender and source of referral.

Conclusion:

- Almost 70% of patients with PsA visited in the PAIDER clinic of our center have a BMI above normal and more than a third of them are obese, mostly grade 1.
- In our joint clinic there are no differences in BMI regarding the source of referral of the patients.
- Patients with obesity are older, have more cardiovascular comorbidities and receive more biological treatment significantly, which increases the complexity of their management and worsens the prognosis.

Disclosure of Interests: Andrea García-Guillén: None declared, Ana Laiz: None declared, Anna Lopez-Ferrer: None declared, HyeSang Park: None declared, Patricia Moya: None declared, Berta Magallares: None declared, Ivan Castellví Consultant of: Boehringer Ingelheim, Actelion, Kern Pharma, Speakers bureau: Boehringer Ingelheim, Actelion, Bristol-Myers Squibb, Roche, Ana Milena Millán Arciniegas: None declared, Cesar Díaz-Torné: None declared, Sicylle Jeria: None declared, Hector Corominas: None declared

DOI: 10.1136/annrheumdis-2020-eular.1271

AB0771

DAPSA REMISSION/LOW DISEASE ACTIVITY IS ASSOCIATED WITH LOW PSAID12 IN PSORIATIC ARTHRITIS

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Background: Psoriatic arthritis (PsA) has a prevalence of 0.17% in North-Western of Spain and patients suffer this disease have significant impact on daily life due to articular, dermatological and psychological symptoms. DAPSA VLDA/LDA (≤14) is a therapeutic goal recommended by EULAR for clinical practice.

Objectives: Our aim was to assess the relationship between DAPSA index and PsAID questionnaire in routine clinical practice.

Methods: We performed a cross-sectional study of patient and physician reported outcomes. We obtained clinical information of patients with PsA attending clinic from October 2018 to October 2019. Data were collected from clinical records concerning age, gender, disease duration, joint counts, dactylitis, enthesitis, body surface area (BSA) of psoriasis, laboratory results (ESR and CRP), HAQ, PsAID12, pain and global assessment from patient with numerical rating scale (NRS) and DAPSA index. Data were analysed using SPSS21. Logistic regression was used to assess patient reported outcomes which were associated with DAPSA VLDA/LDA.

Results: Data were available for 210 patient visits, 43% females. DAPSA ≤14 was in 143 patients (68.1%) and was associated with higher disease duration, OR 1.079 (1.020-1.142, 95% CI), $p = 0.008$. DAPSA index was not associated with BSA ($r = 0.126$, $p = 0.176$).

Figure 1.

PsAID12 was evaluated in 156 patients and we saw that patients with DAPSA $\leq$ 14 had significantly lower PsAID12 (mean $1.7 \pm SD 1.7$ vs. 3.9 ± 2.1), $p < 0.0001$. PsAID12 of less than 4 is considered a good outcome and all items of PsAID12 (Figure 1, mean values for NRS) were less than 4 in patients with DAPSA $\leq$ 14. All components of PsAID12 except item 3 (skin problems) were associated with DAPSA $\leq$ 14 on univariate analysis but only pain remained independent predictor on multiple regression analysis ($p < 0.0001$).

Conclusion: In these PsA patients, DAPSA VLDA/LDA was associated with higher disease duration and with lower PsAID12. Pain is dominant symptom in patients with psoriatic arthritis, even in those with DAPSA $\leq$ 14, and skin problems are not good represented in DAPSA index.

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Acknowledgments: SOGARE

Disclosure of Interests: Carlos García-Porrúa: None declared, Luis Fernández-Dominguez: None declared, Jose L. Guerra-Vazquez: None declared, José Antonio Mosquera Martínez: None declared, Jose Pinto-Tasende Consultant of: Janssen, Novartis, Speakers bureau: Lilly, Janssen, Novartis, BMS, Pfizer, Celgene

DOI: 10.1136/annrheumdis-2020-eular.4775

AB0772 OSTEOPOROSIS AND ITS RELATIONSHIP WITH THE SERUM URIC ACID LEVEL IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: Although osteoporosis is an inherent comorbidity in inflammatory rheumatic disease and the risk of bone loss is high in patients with several rheumatic diseases, evidence is limited in psoriatic arthritis (PsA). One of the most prominent features in PsA is increased serum urate (SU) levels. Due to its antioxidant effects and protective role against osteoporosis, high SU levels are associated with increased bone mineral density (BMD) and reduced bone loss in the healthy population, and in patients with rheumatoid arthritis. However, whether this association is also present in patients with PsA has not been investigated.

Objectives: The aim of this study was to evaluate PsA patients with respect to the presence of osteoporosis and its association with SU levels.

Methods: This ongoing study included 86 patients (68 female, 18 male) who were diagnosed with PsA according to the CASPAR criteria and had indications for BMD testing according to the National Osteoporosis Foundation. Clinical characteristics including body mass index (BMI), pain VAS, patient global VAS, enthesitis, and tender and swollen joint counts were recorded. Evaluations included the PASI, PsAQoL, and HAQ. Disease activity was assessed using the DAPSA, BASDAI, and MDA. Osteoporosis was defined as a BMD T-score of ≤ -2.5 or less and osteopenia as a BMD T-score between -1 and -2.5 (WHO osteoporosis).

Results: The mean age of the study group was 55.4 (SD:9.2) years and the mean disease duration was 84.5 (SD:91.6) months. Indicators of secondary osteoporosis were type-1 diabetes mellitus (1%), hyperthyroidism (2.3%), early menopause ($\leq$ age 40) (8.1%), and chronic liver disease (9.3%). As for the steroid use, the rates of never, previous and current users were 33.7%, 20.9% and 22.1%, respectively. Osteoporosis was found in 9.3% and osteopenia in 33.7% of the patients. A history of vertebral compression fractures or any fracture was

present in 20.9% of the patients, half of whom were in postmenopausal. BMD L₁-L₄ T- and Z-scores were lower in female patients ($p < 0.05$). DAPSA remission and MDA rates were 6% and 15%, respectively. Bone mineral density was similar across DAPSA disease activity categories (remission-low-moderate-high) ($p > 0.05$). The frequency of osteoporosis did not differ significantly between patients with DAPSA remission and non-remission ($p > 0.05$). The mean L₁-L₄ T- and Z-scores, and BMD g/cm² were significantly higher in patients with MDA than those without MDA ($p < 0.05$). The mean SU level was 5 (SD:1.3) mg/dl, and 18.6% of the patients had a SU level of 6 mg/dl or higher. There was no significant correlation between SU and BMD ($p > 0.05$). BMI showed a weak correlation with femur total T-score ($r = 0.244$). PASI showed weak inverse correlations with femur neck T-score ($r = -0.286$) and total femur T-score ($r = -0.245$). BMD variables showed no correlations with disease duration, acute phase reactants, BASDAI, PsAQoL, and cumulative steroid dose.

Conclusion: Patients with PsA did not have an increased prevalence of low BMD despite fractures. Osteoporosis was associated with MDA and the severity of psoriasis, but not with DAPSA, SU level, functional impairment, and quality of life.

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.4820

AB0773 THE INCIDENCE OF RESIDUAL DISEASE ACTIVITY FOLLOWING DIVERSE DISEASE ACTIVITY MEASUREMENTS FOR PSORIATIC ARTHRITIS

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Background: Due to the complex nature of psoriatic arthritis (PsA), diverse disease activity measures have been developed, the most common of which include Disease Activity Score for Psoriatic Arthritis (DAPSA), Minimal Disease Activity (MDA) and Very Low Disease Activity (VLDA). Recently, new composite measures have been developed such as Psoriatic Arthritis Disease Activity Score (PASDAS) and GRACE index. Due to different domains and assessments, even though these measures may indicate remission or low disease activity, residual disease activity (RDA) may persist.

Objectives: The aim of this study was to evaluate RDA in patients with PsA.

Methods: A total of 148 patients (105 female, 43 male; mean age 47.5 (SD:12.6) years) who met the CASPAR criteria for PsA were recruited. Demographic and clinical characteristics of patients were recorded, including pain visual analog scale (VAS), joint VAS, patient global VAS, and tender and swollen joint counts. Evaluations included the Leeds Enthesitis Index (LEI), Psoriasis Area and Severity Index (PASI), Psoriatic Arthritis Quality of Life (PsAQoL), Short-Form 36 Health Survey (SF-36) and Health Assessment Questionnaire (HAQ). Disease activity and remission were assessed using the DAPSA, MDA, VLDA, PASDAS and GRACE Index. MDA was calculated with 5 and 6 positivity criteria separately. Low disease activity (LDA) was defined as follows: DAPSA ≤ 14 , PASDAS ≤ 3.2 and GRACE Index ≤ 2.3 . RDA was defined as the presence of at least one of the following criteria despite remission or LDA: tender and/or swollen joints > 1 , dactylitis > 1 , LEI > 1 , HAQ > 0.5 , PASI > 1 , PtGA > 20 , physician VAS > 20 , or pain VAS > 15 .

Results: The mean duration of disease was 68.2 (SD:80.2) months. DAPSA-LDA, PASDAS-LDA, GRACE-LDA, MDA and VLDA were observed in 48.6%, 14.6%, 14.9%, 23.6% and 2% of PsA patients, respectively. RDA as determined by at least one domain was identified in 91%, 95%, 86% and 86% of patients who were classified as having MDA, DAPSA-LDA, PASDAS-LDA and GRACE-LDA, respectively. Undetected RDA was most common with DAPSA, whereas VLDA completely ruled out RDA. PASDAS and GRACE resulted in similar rates of RDA (Table-1). With DAPSA-LDA, the incidence of RDA in the pain domain was significantly lower with older age. Female patients had higher rates of RDA with the LEI and HAQ ($p < 0.05$).

Conclusion: VLDA was the most and DAPSA was the least sensitive method to detect remission/LDA. RDA should be kept in mind in patients with PsA when using current measures to assess remission or LDA.

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