SAT0447 **PREVALENCE OF RADIOGRAPHIC SACROILIITIS IN PATIENTS WITH PSORIATIC ARTHRITIS AND THE CLINICAL, ANALYTICAL AND DEMOGRAPHIC FACTORS ASSOCIATED TO ITS APPEARANCE**

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Background: To date, published studies suggest that a significant proportion of patients with Psoriatic Arthritis (PsA) present asymptomatic sacroiliitis; that is to say, an inflammatory back pain (IBP) absence. This fact could result in the underdiagnosis of axial involvement in these patients (1).
Objectives: To evaluate the prevalence of radiographic sacroiliitis in patients with PsA and to determine its association with clinical, analytical and demographic factors.
Methods: A cross-sectional, observational, and unicentre study in which clinical, analytical and demographic data from 359 patients belonging to a PsA monographic consultation were analyzed. All patients met the CASPAR criteria. The presence of sacroiliitis in the sacroiliac x-ray image was used as a dependent variable, formerly evaluated by a trained Rheumatologist. Likewise, independent variables related to arthropathy, cutaneous involvement and sociodemographic characteristics of the patients were used as well. A descriptive analysis and two logistic regressions (univariate and multivariate), were performed to associate radiographic sacroiliitis to different covariates.
Results: Out of the 359 patients, 214 (59.6%) were men with a mean time of PsA evolution of 10.05±11.6 years. The x-ray image performed showed sacroiliitis in 127 patients (35.4%). Univariate analysis showed that radiographic sacroiliitis is related ($p<0.05$) to gender (men), psoriasic paternal family history, IBP, positive HLA-B27 antigen and psoriatic cutaneous involvement greater than 25%. The multivariate analysis showed that radiographic sacroiliitis in these patients is predominantly associated to the presence of IBP, the positive HLA-B27 antigen and gender (men). However, sacroiliitis is not not associated to the onset age of PsA ($p>0.05$).

Univariate logistic regression

	Sacroiliitis n=127 (n%)	No Sacroiliitis n=232 (n%)	OR (CI 95%)	p-value
Sex (men)	94 (74.0)	120 (51.7)	2.6 (1.6–4.2)	<0.001
Psoriasis duration, mean (SD)	12.6 (9.2)	10.8 (0.2)	1.0 (0.9–1.0)	0.082
PsA duration, mean (SD)	5.5 (5.9)	4.5 (6.3)	1.0 (1.0–1.0)	0.041
Onset age of PsA ≤45 years	76 (59.8)	131 (56.6)	1.1 (0.7–1.7)	0.536
Family history of Psoriasis – None	70 (56.5)	150 (65.8)	Reference	
– Paternal	29 (23.4)	35 (15.4)	1.7 (1.0–3.1)	0.048
– Maternal	25 (20.2)	43 (18.9)	1.2 (0.7–2.2)	par 0.449
IBP	93 (73.2)	22 (9.5)	26.1 (14.9–47.0)	<0.001
HLA-B27 +	22 (17.5)	11 (4.8)	4.1 (1.9–9.0)	<0.001
Psoriasis extension – <10%	177 (76.6)	78 (61.9)	Reference	
– 10–25%	21 (16.7)	21 (16.7)	1.5 (0.8–2.8)	0.170
– >25%	23 (10.0)	27 (21.4)	2.6 (1.4–4.9)	0.002

Conclusions: The prevalence of radiographic sacroiliitis in our population is 35.4%, higher than in other series due to the fact that the sacroiliac x-ray images were performed on all patients, regardless of the clinic. The radiographic sacroiliitis in patients with PsA is related to the presence of IBP, HLA-B27 antigen and gender. However, the time of evolution of arthropathy and the onset age of PsA are not related to sacroiliac radiographic involvement.
References:
[1] Jadon DR, Sengupta R, Nightingale A, et al. Axial Disease in Psoriatic Arthritis study: defining the clinical and radiographic phenotype of psoriatic spondyloarthritis. Ann Rheum Dis 2016;0:1–7.
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SAT0448 **APREMILAST TREATMENT AND LONG-TERM (UP TO 156 WEEKS) IMPROVEMENTS IN DACTYLITIS AND ENTHESITIS IN PATIENTS WITH PSORIATIC ARTHRITIS: ANALYSIS OF A LARGE DATABASE OF THE PHASE III CLINICAL DEVELOPMENT PROGRAM**

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Background: Dactylitis and enthesitis, hallmark features of psoriatic arthritis (PsA), may be difficult to manage. PALACE 1, 2, and 3 compared the efficacy and safety of apremilast (APR) with placebo (PBO) in patients (pts) with active PsA despite prior conventional DMARDs and/or biologics.
Objectives: Report the impact of long-term APR 30 mg BID (APR30) treatment on dactylitis and enthesitis in pts with active PsA.
Methods: Pts were randomized (1:1:1) to PBO, APR30, or APR 20 mg BID (APR20) stratified by baseline (BL) DMARD use (yes/no). After the 24-wk PBO-controlled phase, all pts received APR30 or APR20 and could enroll in long-term follow-up. Data for pts entering the study with pre-existing dactylitis or enthesitis were pooled across PALACE 1–3, as prespecified, to allow for robust analysis. Dactylitis count (number of digits [hands/feet] with dactylitis present [0=absence, 1=presence]; range: 0–20) was used to assess dactylitis improvement. Enthesitis was evaluated based on MASES (range: 0–13), indicating the number of painful entheses out of 13 enthesis sites. Wk 24 analyses used LOCF for missing values and data for early escape pts; Wks 52 and 156 used data as observed.
Results: Among pts with dactylitis (n=610) or enthesitis (n=915) at BL and ≥1 post-BL value, BL mean dactylitis counts ranged from 3.2 to 3.4 and MASES ranged from 4.4 to 4.8. At Wk 24, mean change in dactylitis count was −1.8 (APR30) vs −1.3 (PBO) (P=0.0097); more APR30 pts achieved a dactylitis count of 0 vs PBO pts (Table). Mean change in MASES was −1.3 (APR30) vs −0.9 (PBO) (P=0.0194); more APR30 pts achieved a MASES of 0 vs PBO pts. Significant effect on enthesitis was confirmed in the PSA-006 (ACTIVE) study of APR in pts with a maximum of 1 previous DMARD treatment, in which the Gladman Enthesitis Index was used, focusing on more peripheral sites of activity: significant effect for APR vs PBO was seen as early as Wk 2, and at Wk 24, mean changes were −1.5 vs −0.5 (P=0.0032, MMRM). Sustained improvements in dactylitis and enthesitis severity were seen in APR pts at Wk 156 in PALACE 1–3 (Table): for dactylitis, 79.6% achieved a count of 0 and the mean percent change was −83.6%; for MASES, 55.0% of APR pts achieved a score of 0 and the mean percent change was −65.2%.

	Wk 24		Wk 52	Wk 156
Dactylitis Count*	**PBO n=205**	**APR30 n=221**	**APR30 n=249**	**APR30 n=181**
BL, mean	3.3	3.2	3.4	3.4
Mean change from BL	−1.3	−1.8‖	−2.5	−3.0
Mean % change from BL	−38.2	−48.6	−67.9	−83.6
Median % change from BL	−66.7	−79.3	−100.0	−100.0
Pts achieving score of 0, %	39.0	46.2	67.5	79.6
MASES§	**PBO n=311**	**APR30 n=327**	**APR30 n=377**	**APR30 n=278**
BL, mean	4.8	4.4	4.4	4.2
Mean change from BL	−0.9	−1.3‡	−2.0	−2.7
Mean % change from BL	−7.0	−23.6‡	−43.5	−65.2
Median % change from BL	−21.1	−50.0‡	−66.7	−100.0
Pts achieving score of 0, %	22.5	27.5	37.7	55.0

The n at Wk 24 represents pts with a BL value >0. The n at Wk 52 and Wk 156 represents the number of pts taking APR, regardless of when treatment started (BL, Wk 16, or Wk 24), with a BL value >0 and a value at Wk 52 or Wk 156.
*Dactylitis count is the sum of all scores (0=absence of dactylitis; 1=presence of dactylitis) from each of the 20 digits. §MASES ranges from 0 to 13, with 0 indicating no pain at any assessed enthesis and 13 indicating pain at all assessed entheses. ‡P<0.05 vs PBO. ‖P<0.01 vs PBO.
PBO=placebo; APR30=apremilast 30 mg BID; BL=baseline; pts=patients; MASES=Maastricht Ankylosing Spondylitis Enthesitis Score.

Conclusions: The majority of pts (63%) in PALACE 1–3 had active enthesitis and 42% had dactylitis at BL. APR30 demonstrated early and long-term benefit (up to 156 wks) in treating dactylitis and enthesitis, including resolution of BL disease in many pts.
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