AB0781 PSORIATIC ARTHRITIS IN PSORIASIS PATIENTS: RESULTS OF A FRENCH SURVEY

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Background: Early detection of psoriatic arthritis (PsA) in patients with skin psoriasis (Pso) is critical to reduce the risk of joint damage, disability, and comorbidities. However PsA is mostly under-diagnosed in patients with Pso.
Objectives: first to compare characteristics of patients with Pso without PsA with those of patients with Pso and PsA, then to compare patients with Pso and potential but undiagnosed PsA (puPsA) to the other patients.
Methods: 817 patients completed an online questionnaire published by the French Psoriasis Patients Association, including multiple-choice questions regarding in particular past and current symptoms. For analysis, a first comparison was performed between patients with Pso without known PsA and patients with Pso and PsA, then between patients with symptoms suggestive of PsA (puPsA group), i.e., patients with past or current joint or back pain accompanied by waking up at night and/or morning stiffness, with PsA patients on the one hand, and with patients without known PsA and without symptoms suggestive of puPsA, on the other hand.
Results: 746 patients reported having Pso of which 192 (25.7%) had also PsA. Among the 554 patients without known PsA, 190 (34.3%) had symptoms suggestive of PsA, 101 (18.2%) had rheumatologic symptoms not suggestive of PsA, and 263 (47.5%) had no rheumatologic symptoms. The comparison, in multivariate analysis, between patients with Pso and PsA and patients with Pso without known PsA showed significant differences ($p<0.05$): Pso and PsA patients had more often current bone or joint pain at any time (OR=7.8), joint pain during the day (OR =2.45), stiff back or joints on waking (OR=1.77), painful and swollen fingers and toes (OR=3.15), past joint pain during the day (OR=3.05), and drug in tablet form (OR=2.07), biotherapy alone (OR=5.45) or with DMARDs (OR=16.06); conversely they had less often guttate psoriasis (OR=0.54). Results of the multivariate analysis comparing patients with puPsA to the other patients are shown in Tables 1 and 2 (comparison with patients with Pso and PsA in Table 1; comparison with patients with Pso without known PsA in Table 2).

Table 1. Multivariate analysis, patients with puPsA and Pso compared with patients with Pso and PsA

Covariates ($p<0.05$ for all OR)	OR [95% CI]
Current skin pain	OR=1.85 [1.12; 3.08]
Current bone or joint pain	OR=0.25 [0.15; 0.44]
Current joint pain during the day	OR=0.49 [0.29; 0.84]
Current back pain	OR=2.55 [1.52; 4.29]
Current painful and swollen fingers and toes	OR=0.29 [0.17; 0.51]
Past joint pain during the day	OR=0.39 [0.19; 0.79]
Biotherapy/Neither biotherapy nor DMARD	OR=0.28 [0.12; 0.67]
Biotherapy + DMARD/Neither biotherapy nor DMARD	OR=0.15 [0.04; 0.55]

Table 2. multivariate analysis, patients with Pso without known PsA compared with patients with puPsA

Covariates ($p<0.05$ for all OR)	OR [95% CI]
Current nail changes	OR=1.53 [1.02 ; 2.29]
Current fatigue	OR=2.53 [1.72 ; 3.72]
Other current symptoms	OR=0.33 [0.18 ; 0.60]
Hydration	OR=1.48 [1.01 ; 2.18]

Conclusions: That survey on Pso patients showed that a fourth of them also had PsA, but more importantly that about another fourth had puPsA, highlighting the underdiagnosis of PsA. It suggests that presence of fatigue and nail changes might raise suspicion of PsA in Pso patients.
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AB0782 PSORIATIC ARTHRITIS EARLY ULTRASONOGRAPHIC CHANGES IN PATIENTS WITH PSORIASIS AND NAIL PSORIASIS. A COMPARATIVE STUDY WITH SUBJECTS WITHOUT PSORIASIS

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Background: Psoriatic Arthritis (PsA) has a prevalence of 30% amongst Psoriasis (Ps)patients. However in patients with ungueal Ps the prevalence has been reported in up to 68% of cases. In muskuloskeletal ultrasound (MSUS) studies the lesion most frequently reported is enthesitis followed by synovitis in early PsA patients.
Objectives: To determine the presence of psoriatic arthritis early ultrasonographic changes in patients with psoriasis, nail psoriasis, and subjects without psoriasis.
Methods: Analytic, comparative, prospective and transversal study, in which patients with psoriasis, nail psoriasis, and subjects without psoriasis paired by age, were recruited. Each group underwent a skin and joint checkup, which included demographic data, comorbidities, psoriasis severity and joint signs and symptoms. The ultrasonographic evaluation consisted in a gray scale detection and classification according to severity scales, of synovitis, enthesitis, synovial effusion and bone erosions in the distal interphalangeal joints of both hands.
Results: A total of 16 patients, 8 with psoriasis and 8 with nail psoriasis, as well as 9 subjects without psoriasis, were recruited. The psoriasis group included mostly men (87.5%), unlike the subjects without psoriasis (44.4%) and the nail psoriasis group (37.5%) (p=0.09). The mean age for the study population was 55.16 + 8.09 years. There was no statistical significance between groups (p=0.430). The greatest prevalence of comorbidities was found in both groups with psoriasis. The mean time of disease duration in the nail psoriasis group was 20.12 + 14.54 years, vs 13.37 + 14.45 years in the psoriasis group (p=0.247). Synovitis was found in 100% of patients in the psoriasis group, vs 37.5% in the nail psoriasis group, and 62.5% in the subjects without psoriasis group (p=0.028). No enthesitis was observed in any group

Prevalence of synovitis

	Synovitis	Grade 1	Grade 2	Grade 3
Control group	62.5 %	12.5 %	37.5 %	12.5 %
Ungueal Psoriasis	37.5 %	62.5 %	25 %	12.5 %
Psoriasis	100 %	25 %	50 %	12.5 %

Chi-square test for synovitis between groups p= 0.28.
Chi-square test for synovitis grading p=0.269

Conclusions: Synovitis was more frequent than enthesitis in our population as an ultrasonographic finding of psoriatic arthritis. No association was found between other variables with synovitis, such as age, sex, disease duration and comorbidities.
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AB0783 THE RELATIONSHIP BETWEEN THE DEGREE OF SKIN INVOLVEMENT AND JOINT ACTIVITY IN PATIENTS WITH PSA: EXPERIENCE FROM THE CORRONA REGISTRY

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Background: Prior studies have shown inconsistent relationships between skin and joint symptoms in patients with comorbid psoriasis (PsO) and psoriatic arthritis (PsA)[1–3].
Objectives: To characterize the relationship between skin severity and joint activity in patients with comorbid PsA and PsO at enrollment.
Methods: Data from the U.S. Corrona PsA/spondyloarthritis (PsA/SpA) registry were obtained from the period 3/21/2013– 9/30/2016. Inclusion criteria included a diagnosis of PsA, a history of PsO, and age greater than 18 years. PsA patients were evaluated for skin severity as defined by Body Surface Area (BSA) and joint activity as defined by the level of clinical disease activity index (CDAI). Patient characteristics, including current and prior PsA medication use, were obtained during the enrollment visit. We evaluated the relationship of skin severity (BSA) and joint activity (CDAI) with multi-variable linear regression.
Results: 1,542 patients met inclusion criteria: 52.9% were women with mean (SD) age 53.7 (13.2) years, with median 9.0 years PsA disease duration, and 71 (4.6%) with fibromyalgia. 266 (18%) patients were on no DMARD therapy, 430 (29%)

were on csDMARDs only, 616 (42%) were on first line biologic/targeted synthetic (ts)DMARD therapy, and 172 (12%) were on second line biologic/tsDMARD therapy. The relationship between skin severity and joint activity was statistically significant ($p<0.0001$) with a correlation of 0.183. Results were similar when adjusting separately for treatment and for duration of PsA and PsO. Greater age, female gender, higher dactylitis count, not achievement of MDA, higher HAQ, and patient reported pain and fatigue affected the relationship.

Conclusions: The relationship between skin severity and joint activity is statistically significant and varies by age, gender, MDA, HAQ, and patient reported pain and fatigue. This suggests degree of skin involvement is important to take into account when evaluating PsA patients.

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AB0784 EFFECTIVENESS OF ANTI-TNFS ON DACTYLITIS AND ENTHESITIS IN PATIENTS WITH PSORIATIC ARTHRITIS: RESULTS FROM THE CORRONA PSORIATIC ARTHRITIS/SPONDYLOARTHRITIS REGISTRY

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Background: Dactylitis and enthesitis are common disease manifestations encountered in nearly 10–30% of patients with psoriatic arthritis (PsA). Previous clinical trial data suggests that anti-tumor necrosis factors (aTNFs) are effective in controlling dactylitis and enthesitis among PsA patients, however there are limited data from real world studies.

Objectives: To evaluate the effectiveness of aTNFs on dactylitis and enthesitis in patients with PsA enrolled in Corrona, a large US observational cohort of patients with PsA and spondyloarthritis.

Methods: Adult PsA patients who initiated or were currently on an aTNF at registry enrollment (baseline) between 3/2013–9/2016 and had a 12 month follow-up visit were included. Dactylitis was defined as a non-zero total dactylitis score on a scale 0–20 and enthesitis was defined by a non-zero score on the SPARCC enthesitis index, 0–16. The primary outcome was change in dactylitis and enthesitis scores at 12 months from baseline. Descriptive analysis of patient characteristics at baseline was examined and change in outcomes was evaluated using t-tests.

Results: There were 28 patients with dactylitis and 77 patients with enthesitis who met the inclusion criteria. Patients with dactylitis and enthesitis had a mean (SD): age of 48.2 (14.8) and 53.5 (11.5) years, body mass index of 30.8 (6.6) and 31.4 (7.6), disease duration of 9.3 (9.1) and 8.1 (7.7) years, and 28.6% and 45.5% were on methotrexate combination therapy respectively. Patients had a mean clinical disease activity index of 15.1 in both groups, 40.0% and 17.1% were in minimal disease activity, mean (SD): body surface area was 4.4 (4.4) and 5.2 (9.7), pain was 33.1 (29.5) and 43.3 (27.5) on a visual analogue scale (VAS) of 0–100, and more than 80% and 90% of patients had some morning stiffness in the dactylitis and enthesitis groups, respectively. At 12 months from baseline, there were significant improvements in both dactylitis and enthesitis scores in patients with PsA treated with aTNFs (Table).

Table: Primary outcomes in PsA patients on aTNFs at 12 months from baseline

	At enrollment	At 12 month visit	Change in score (enrollment – 12 month visit	p-value*
Dactylitis Count (0-20)	n=28	n=28	n=28	
Mean (± SD)	2.1 (±1.5)	0.5 (±1.1)	-1.6 (±1.8)	0.001
SPARCC Enthesitis Count (0-16)	n=77	n=77	n=77	
Mean (± SD)	4.1 (±3.2)	1.9 (±2.8)	-2.2 (±3.2)	<0.001

SPARCC: Spondyloarthritis Research Consortium of Canada; *Calculated based on a t test assessing whether the change in counts differs from 0.

Conclusions: In this clinical registry, aTNF therapy significantly improved both dactylitis and enthesitis at 12 months. Further evaluation of secondary outcomes and larger studies with comparator cohorts will further validate the effectiveness of aTNFs in improving the outcomes in PsA patients.

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AB0785 CONSISTENT SAFETY PROFILE WITH UP TO 4 YEARS OF APREMILAST TREATMENT: ANALYSIS OF DATA FROM 1493 PATIENTS WITH PSORIATIC ARTHRITIS IN 3 LARGE, PHASE III, LONG-TERM STUDIES

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Background: Apremilast (APR), an oral phosphodiesterase 4 inhibitor, regulates immune activity in psoriatic arthritis (PsA) patients. Safety data were pooled from the phase 3 PALACE 1, 2, and 3 studies.

Objectives: Evaluate the long-term safety of APR treatment for up to 4 years in patients with active PsA despite prior conventional DMARDs and/or biologics.

Methods: Patients were randomized at baseline (1:1:1) to placebo (PBO), APR 30 mg BID (APR30), or APR 20 mg BID (APR20). PBO patients were re-randomized

	APR-Exposure Period*			
	Weeks 0 to ≤52	Weeks >52 to ≤104	Weeks >104 to ≤156	Weeks >156 to ≤208
	APR30 n=721	APR30 n=520	APR30 n=443	APR30 n=401
Patients, n (%)				
≥1 AE	524 (72.7)	316 (60.8)	284 (64.1)	234 (58.4)
≥1 SAE	47(6.5)	35 (6.7)	40 (9.0)	28 (7.0)
AE leading to drug withdrawal	56 (7.8)	13 (2.5)	7 (1.6)	7 (1.7)
Death	0 (0.0)	1§ (0.2)	0 (0.0)	2‡‖ (0.5)
AEs in ≥5% of patients, n (%)				
Diarrhea	112 (15.5)	20 (3.8)	12 (2.7)	4 (1.0)
Nausea	108 (15.0)	11 (2.1)	10 (2.3)	3 (0.7)
Headache	75 (10.4)	17 (3.3)	12 (2.7)	7 (1.7)
Upper respiratory tract infection	60 (8.3)	27 (5.2)	24 (5.4)	21 (5.2)
Nasopharyngitis	41 (5.7)	31 (6.0)	20 (4.5)	26 (6.5)
Select marked abnormalities in clinical laboratory parameters, n/m (%)				
Alanine aminotransferase >3× ULN	9/713 (1.3)	2/518 (0.4)	2/442 (0.5)	1/401 (0.2)
Creatinine >1.7× ULN	1/713 (0.1)	0/518 (0.0)	0/442 (0.0)	1/401 (0.2)
Leukocytes <1.5, 10^9/L	0/713 (0.0)	0/517 (0.0)	0/442 (0.0)	0/401 (0.0)
Neutrophils <1, 10^9/L	2/713 (0.3)	3/517 (0.6)	2/442 (0.5)	2/401 (0.5)
Platelets <75, 10^9/L	0/713 (0.0)	0/517 (0.0)	1/441 (0.2)	0/399 (0.0)
Hemoglobin, male <10.5 g/dL, female <8.5 g/dL	5/713 (0.7)	4/517 (0.8)	5/442 (1.1)	5/401 (1.2)

*Includes all patients who received APR during the time interval relative to the start of APR treatment. §Motor vehicle accident on Day 489. ‡Cerebrovascular accident on Day 1330 in a 69-year-old man, considered unrelated to study drug; patient had history of myocardial infarction, atrial fibrillation, and cerebrovascular accident. ‖Stroke on Day 1224 in a 58-year-old woman, considered unrelated to study drug; patient had a history of chronic ischemic heart disease, hypertension, alcoholism, and atrial fibrillation. APR30=apremilast 30 mg BID; AE=adverse event; n/m=number of patients with ≥1 occurrence of the abnormality at any time point/number of patients with ≥1 post-baseline value; ULN=upper limit of normal.