Disclosure of Interests: Alen Zabotti Speakers bureau: UCB, Novartis, Janssen, Paid instructor for: Amgen, Consultant of: Janssen, Orazio De Lucia Speakers bureau: Not relevant for this type of study, Consultant of: Not relevant for this type of study, Grant/research support from: Not relevant for this type of study, Garifallia Sakellariou Consultant of: AbbVie, Novartis, Alberto Batticciotto Speakers bureau: Not relevant for this type of study, Consultant of: Not relevant for this type of study, Grant/research support from: Not relevant for this type of study, Gilberto Cincinelli: None declared, Ivan Giovannini: None declared, Luca Idolazzi Speakers bureau: Eli Lilly, UCB, Celgene, MSD, Abbvie, Novartis, Paid instructor for: UCB, Gabriella Maioli Speakers bureau: Not relevant for this type of study, Consultant of: Not relevant for this type of study, Grant/research support from: Not relevant for this type of study, Ilaria Tinazzi Speakers bureau: Not relevant for this type of study, Consultant of: Not relevant for this type of study, Grant/research support from: Not relevant for this type of study, Daniel Aletaha Speakers bureau: not relevant for this type of study, Consultant of: not relevant for this type of study, Grant/research support from: not relevant for this type of study, Salvatore De Vita Consultant of: GSK, Roche, Grant/research support from: Not relevant for this type of study, Antonio Marchesoni Speakers bureau: not relevant for this type of study, Consultant of: not relevant for this type of study, Grant/research support from: not relevant for this type of study, Josef S. Smolen Speakers bureau: Not relevant for this type of study, Consultant of: Not relevant for this type of study, Grant/research support from: Not relevant for this type of study, Annamaria Iagnocco Speakers bureau: not relevant for this type of study, Paid instructor for: not relevant for this type of study, Consultant of: not relevant for this type of study, Grant/research support from: not relevant for this type of study, Dennis McGonagle Speakers bureau: ABBVIE, CELGENE, PFIZER, MSD, NOVARTIS, JANSSEN, UCB, GILEAD, BMS, LILLY, Grant/research support from: ABBVIE, CELGENE, PFIZER, MSD, NOVARTIS, JANSSEN, UCB, GILEAD, BMS, LILLY, Roberto Caporali Speakers bureau: Abbvie, Amgen, BMS, Celltrion, Galapagos, Gilead, Lilly, Pfizer, Roche, UCB, Sanofi, Fresenius Kabi, Samsung bioepis, MSD, Consultant of: Galapagos, Gilead, Lilly, Janssen, MSD
DOI: 10.1136/annrheumdis-2021-eular.1513

POS0146

PERIPHERAL NEUROPATHY IN PSORIASIS AND PSORIATIC ARTHRITIS: A SINGLE BLIND, CONTROLLED, ELECTROPHYSIOLOGICAL STUDY

M. Izci¹, S. Kanyılmaz Turgut¹, O. Akan², I. Topal³, O. Kuru¹, ¹Prof Dr Cemil Tascioglu City Hospital, Physical Medicine and Rehabilitation Clinic, Istanbul, Turkey; ²Prof Dr Cemil Tascioglu City Hospital, Neurology Clinic, Istanbul, Turkey; ³Prof Dr Cemil Tascioglu City Hospital, Dermatology Clinic, Istanbul, Turkey

Background: It is well known that both psoriasis (PsO) and psoriatic arthritis (PsA) causes morbidity and disability in patients' lives. Additional pathologies such as peripheral neuropathy (PN) may interfere with disease specific symptoms and may increase the burden of disease. Neuropathic complaints of patients with PsO and PsA are observed during patients' follow-up (1,2). However, the presence of PN in PsO and PsA is not well defined in clinical studies and clinicians might be neglecting this issue.

Objectives: Our aim was to investigate the presence of PN by electrophysiological methods and to examine its relationship with neuropathic pain and with treatments in patients with PsO and PsA.

Methods: 38 patients with PsA, 36 patients with PsO and 37 age&sex-matched healthy volunteers were enrolled into this prospective, single-blind study. Disease activity was assessed with Psoriasis Area Severity Index (PASI) for patients with PsO and with Disease Activity in Psoriatic Arthritis (DAPSA) score for patients with PsA. Leeds Assessment of Neuropathic Symptoms and Signs (LANSS) score was used to evaluate neuropathic pain. All participants were electrophysiologically examined in Electromyography (EMG) Laboratory by an experienced neurologist blinded for study groups.

Results: There were no significant differences on patients age, sex and body mass index among 3 study groups ($p>0.05$). However, disease duration was significantly longer in PsO group compared to PsA group (median 19.1[1-43] years in PsO vs median 7.5[2-29] years in PsA; $p<0.01$). PN was detected in 7 patients

(19.44%) in the PsO group, 14 patients (34.21%) in the PsA group, and in 1 volunteer (2.7%) in the control group (PsO vs control: $p<0.05$; PsA vs control: $p<0.001$, PsO vs PsA: $p>0.05$) (Table 1). Among patients with PsA, 1 patient had ulnar neuropathy and 1 patient had both carpal tunnel syndrome (CTS) and sensory polyneuropathy. All other PN detected electrophysiologically were CTS. Neuropathic pain was present in 11 patients (30.56%), 20 patients (52.63%) and in 2 volunteers (5.41%) in PsO, PsA and control groups consecutively (PsO vs control: $p<0.05$; PsA vs control: $p<0.001$, PsO vs PsA: $p>0.05$). PN did not show any significant correlation with disease activity or treatments including biological agents.

Conclusion: To our knowledge, this is the first study to investigate simultaneously the presence of neuropathic pain and PN by electrophysiological methods in patients with PsO and PsA. We observed PN and neuropathic pain high in patients with PsO&PsA and among them CTS appears as the most prominent neuropathy. Clinicians should keep this in mind during routine care of patients with PsO and PsA, which may improve patient-centred care. Large, prospective studies are needed to understand the characteristics of these neuropathies and its prognosis.

REFERENCES:

- [1] Riffbjerg-Madsen S, Christensen AW, Christensen R, Hetland ML, Bliddal H, Kristensen LE, Danneskiold-Samsøe B, Amris K (2017) Pain and pain mechanisms in patients with inflammatory arthritis: a Danish nationwide cross-sectional DANBIO registry survey. *PLoS One* 12(7):e0180014.
- [2] Ljosaa TM, Mork C, Stubhaug A, et al. Skin pain and skin discomfort is associated with quality of life in patients with psoriasis. *J Eur Acad Dermatol Venereol*. 2012;26:29-35.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.1258

POS0147

ANALYSIS OF VENOUS THROMBOEMBOLIC RISK AMONG PSORIATIC ARTHRITIS PATIENTS

T. Gazit¹, J. Pesachov², I. Lavi³, M. Elias¹, A. Haddad¹, I. Feldhamer⁴, A. Cohen⁴, W. Saliba³, D. Zisman^{1,5}, ¹Carmel Hospital, Rheumatology, Haifa, Israel; ²Technion - Israel Institute of Technology, Ruth and Bruce Rappaport Faculty of Medicine, Haifa, Israel; ³Carmel Hospital, Community Medicine and Epidemiology, Haifa, Israel; ⁴Clalit Health Organization, Chief Physician's Office, Central Headquarters, Tel Aviv, Israel; ⁵Technion - Israel Institute of Technology, Ruth and Bruce Rappaport Faculty of Medicine, Haifa, Israel

Background: Psoriatic arthritis (PsA) is a chronic, immune-mediated, systemic inflammatory arthritis associated with comorbidities including metabolic syndrome, cardiovascular risk factors and cardiovascular disease (CVD).

Objectives: To evaluate the prevalence of venous thromboembolism (VTE) in a PsA patient cohort using a large health care provider database.

Methods: A large health care provider database serving 4.7 million healthcare subscribers was interrogated for an adult patient cohort who were newly diagnosed with PsA between January 2005 (start date) and 31 December 2018 with date of diagnosis considered the index date. A risk set was employed to randomly select 4 controls without PsA as a comparator group to the PsA cohort matched by age, sex, ethnic group, and index date. Both groups were followed from the index date until the first occurrence of VTE event, death, or end of follow-up 31 December 2019, whichever came first. Marginal model with robust covariate estimate counting for the matching was used to estimate the crude and adjusted hazard ratio (HR) for the association between PsA and VTE. Within the group of PSA patients, Cox proportional hazard regression models was used to calculate the risk of having VTE given demographic variables, SES, smoking, selected comorbidities, and conventional vs biologic disease modifying anti-rheumatic drugs (c/bDMARD). Continuous variables were summarized with mean $\pm$ standard deviation, and categorical variables were presented as numbers and proportions. All tests were 2-sided; p values of ≤ 0.05 were considered statistically significant. All data were analyzed using SPSS, 24 (IBM SPSS Statistics for Windows, version 24.0, 2016, Armonk, NY) and SAS, 9.4 (SAS institute Inc, Cary, NC).

Table 1. Results of peripheral neuropathy and neuropathic pain in control group and patients with PsO and PsA

	Control Group (n=37)	PsO Group (n=36)	PsA Group (n=38)	p ^a	p ⁺	p ^Δ
CTS	1 (%2.70)	7 (%19.44)	13* (%34.21)	0.028 ^a	<0.001 ^a	0.153 ^a
Ulnar Neuropathy	0	0	1 (%2.63)			
Polyneuropathy	0	0	1* (%2.63)			
Total PN	1 (%2.70)	7 (%19.44)	14 (%36.64)	0.028 ^a	<0.001 ^a	0.097 ^a
LANSS Score	5 (0:13)	6.50 (0:16)	13 (3:19)	0.170 ^b	<0.001 ^b	0.004 ^b
According to LANSS likely neuropathic pain	2 (%5.41)	11 (%30.56)	20 (%52.63)	0.005 ^a	<0.001 ^a	0.054 ^a

*: Both polyneuropathy and CTS were detected in one patient in the PsA group; Data are given as n (%) and median (minimum: maximum); a: Chi-Square Test, b: Kruskal Wallis Test; p^Δ value: control vs PsO, p⁺ value: control vs PsA, p^a value: PsO vs PsA

Results: The PsA cohort consisted of 5,275 patients, 53.2% females with mean age of 51.66 ± 15.41. The control group consisted of 21,011 subjects matched for age and sex. In relation to the control group, the PsA cohort had a higher SES (25.1% vs 23.4%, $p < 0.0001$), higher tobacco use (42.2% vs 39.6% $p < 0.0001$) and obesity (33.5% vs 25.8%, $p < 0.0001$). The study group had a statistically significant higher incidence of diabetes (33.8% vs 26.2%, $p < 0.0001$), IHD (10.3% vs 8.6%, $p < 0.0001$), CHF (2.2% vs 1.6%, $p = 0.004$), hypertension (30.1% vs 26.2%, $p < 0.0001$), CVA/TIA (4.6% vs 3.9%, $p = 0.024$) and vascular disease (3.7% vs 3.0%, $p = 0.005$). There were 62 patients (1.2%) diagnosed with VTE in the PsA group as opposed to 176 patients (0.8%) in the control group ($p = 0.023$, HR = 1.397, CI 1.05-1.87). The mean age of patients diagnosed with VTE was higher in the PsA group relative to controls (64.90 ± 13.20 vs 51.54 ± 15.41, respectively, $p < 0.0001$), with higher age, BMI > 30, cancer, IHD, vascular disease, and previous VTE found to be associated with VTE in the PsA group relative to controls in both univariate and multivariate analyses. The higher prevalence of VTE in PsA patients relative to controls did not remain statistically significant in multivariate analysis following adjustment for risk factors. Within the PsA group, patients with VTE were more often of older age and with past history of VTE. Both cDMARD and bDMARD were not associated with increased risk of VTE among PsA patients.

Conclusion: The prevalence of VTE was higher in PsA group compared to the general population, but after adjustment for comorbidities and risk factors, it no longer remained statistically significant. Among PsA patients, age and previous history of VTE were associated with increased risk of VTE. Addressing VTE risk in the management of patients with PsA is recommended especially in the era of Janus kinase inhibitors.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.1811

POS0148 MATERNAL AND NEONATAL OUTCOMES IN PREGNANT WOMEN WITH PSORIASIS AND PSORIATIC ARTHRITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS

W. Xie¹, H. Huang¹, Z. Zhang¹. ¹Peking University First Hospital, Department of Rheumatology and Clinical Immunology, Beijing, China

Background: Psoriasis and psoriatic arthritis (PsA) are inflammatory diseases that affect women in their reproductive years. The evidence regarding the pregnancy outcomes in psoriasis and PsA is more limited and conflicting, to a large extent, confusing our knowledge on this topic.

Objectives: We aim to investigate whether maternal psoriasis and PsA are associated with adverse pregnancy outcomes.

Methods: We searched multiple electronic databases from inception to 3 August 2020, and reference lists of selected articles. Observational studies reporting at least one pregnancy outcomes in women with psoriasis or PsA with a comparator of general population or healthy subjects were included. Data were pooled by random-effects models (DerSimonian and Laird method) and expressed as odds ratio (OR) and 95% confidence interval (CI).

Results: Overall, 16 studies were included in the meta-analysis. The pooled analyses showed pregnant women with psoriatic diseases have significantly higher risk of adverse maternal outcomes compared with general population (caesarean delivery: 1.33 (1.17-1.52); preterm birth: 1.32 (1.15-1.52); (pre)eclampsia: 1.28 (1.14-1.43); gestational diabetes: 1.19 (1.10-1.30); gestational hypertension: 1.30 (1.18-1.44) (Figure 1). However, no statistically increased risks of fetal complications were observed in women with psoriatic diseases (small for gestational age: 1.02 (0.93-1.11); low birth weight: 1.15 (0.93-1.42); congenital malformations: 1.03 (0.93-1.14); Apgar score < 7: 1.07 (0.81-1.39); neonatal mortality: 1.13 (0.90-1.43); stillbirth: 1.19 (0.95-1.50)). Subgroup analysis found similar results in women with either psoriasis or PsA regarding maternal outcomes, but the magnitude of risk estimates seems to be greater in PsA.

Conclusion: Pregnant women with psoriasis and PsA have excess risk of adverse maternal events, with seemingly higher risk in women with PsA, but not adverse neonatal events. Close monitoring of the mothers' clinical status before and during pregnancy are decidedly required in daily practice.

Figure 1. Forest plots of the odds ratio for the risk of adverse pregnancy outcomes in patients with psoriatic diseases.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.2283

POS0149 MUSCULOSKELETAL PAIN IN PATIENTS WITH PSORIASIS AND THE INFLUENCE ON HEALTH-RELATED QUALITY OF LIFE: RESULTS FROM A DANISH POPULATION-BASED SURVEY

S. Kamp Felbo^{1,2}, L. Terslev^{1,2}, I. J. Sørensen³, L. Skov^{2,4}, C. Zachariae^{2,4}, M. Østergaard^{1,2}. ¹Rigshospitalet, Copenhagen Center for Arthritis Research, Center for Rheumatology and Spine Diseases, Glostrup, Denmark; ²University of Copenhagen, Department of Clinical Medicine, Copenhagen, Denmark; ³Rigshospitalet, Center for Rheumatology and Spine Diseases, Copenhagen, Denmark; ⁴Herlev and Gentofte Hospitals, Department of Dermatology and Allergy, Gentofte, Denmark

Background: Psoriasis (PsO) impacts health-related quality of life (HRQoL). The impact of musculoskeletal (MSK) pain in patients without diagnosed psoriatic arthritis (PsA) (1) is poorly understood.

Objectives: To assess the pattern of MSK pain in patients with PsO, and its influence on important patient-reported outcomes.

Methods: A nationwide survey of patients with PsO and PsA, covering skin and MSK symptoms, healthcare contacts, self-assessed disease severity, treatment satisfaction, HRQoL (including Dermatology Life Quality Index (DLQI) and European Quality of life-5 Dimensions (EQ5D)) and disability. Respondents were grouped according to MSK pain as shown in Table 1. 'PsO previous pain' was combined with 'PsO no pain ever' (labeled 'PsO no pain now') for some analyses and with 'PsO pain now' (labeled 'PsO pain ever') for others.

Results: 561 respondents with PsO completed the questionnaire. Population and subgroup demographics, clinical PsA/PsO features and HRQoL measures are shown in Table 1. Patients in 'PsO pain now' had poorer HRQoL (higher DLQI, lower EQ5D) compared to 'PsO no pain now', and similar to patients with PsA. Patients with PsA assessed their PsO severity higher than patients with 'PsO pain ever' and 'PsO no pain ever' (median (interquartile range) 2 (2-3), 2 (1-3) and 2 (1-2) on a five-level scale, respectively). PsO treatment satisfaction (five-level scale) was lower for 'PsO pain ever' (3 (3-4)) than for 'PsO no pain ever' (4 (3-4), $p = 0.03$). Figure 1 shows contacts to dermatologists and rheumatologists, where 72% of patients in 'PsO pain ever' had never been examined by a rheumatologist. Time from symptom debut to diagnosis was 1.5 (1-3) years for PsO and 7.5 (1.5-12.5) for PsA.

Table 1. Population and subgroup characteristics

DEMOGRAPHICS	All	PsO			PsA	p-value*		
		PsO no pain ever	previous pain	PsO pain now				
N	561	178	104	130	108			
Male	212 (38%)	79 (44%)	34 (33%)	36 (28%)	40 (37%)			0.02
Age (years)	58 (43-68)	58 (43-68)	56 (42-63)	53 (43-63)	58 (48-68)			0.05
Body Mass Index	27 (24-32)	26 (23-30)	28 (24-32)	29 (25-33)	28 (24-33)			0.01
No current occupation ¹	119 (21%)	20 (11%)	23 (22%)	34 (26%)	35 (32%)			<0.001
PsO/PsA FEATURES	All	1. PsO no pain ever	2. PsO pain ever	3. PsA	1 vs. 2	1 vs. 3	2 vs. 3	
N	561	178	234	108				
BSA (%)	1 (1-2)	1 (1-2)	1 (1-2)	2 (1-2)	0.10	<0.001	0.01	
Nail psoriasis	134 (24%)	27 (15%)	50 (21%)	46 (48%)	0.13	<0.001	<0.001	
'Dactylitis' ^{2a}	80 (14%)	2 (1%)	34 (15%)	40 (42%)	<0.001	<0.001	<0.001	
'Enthesitis' ^{2b}	74 (13%)	4 (2%)	30 (13%)	39 (41%)	<0.001	<0.001	<0.001	
QUALITY OF LIFE AND DISABILITY	All	1. PsO no pain now	2. PsO pain now	3. PsA	1 vs. 2	1 vs. 3	2 vs. 3	
N	561	282	130	108				
DLQI score (0-30)	2 (1-5)	1 (1-4)	2 (1-5)	2 (1-6)	0.001	0.04	0.52	
EQ5D index (0-1)	0.797 (0.691-0.859)	0.859 (0.768-1)	0.732 (0.679-0.859)	0.702 (0.598-0.802)	<0.001	<0.001	0.53	
HAQ score (0-3)	0.63 (0-1.25)		0.50 (0-0.88)	0.88 (0.13-1.38)			0.03	

Numbers are numbers (%) (binary data), median (interquartile range) (continuous data). BSA: Body Surface Area (palm-size areas of the body with psoriasis). DLQI: Dermatology life quality index (higher scores = higher impact of disease). EQ5D: European Quality of life-5 Dimensions -5 Domain (higher scores = better health state). HAQ: Health assessment questionnaire. PsA: Psoriatic arthritis. PsO: Psoriasis.* Multiple groups: Chi-square test/ Kruskal-Wallis test. Pairwise: Fishers exact test/Mann-Whitney U test. 1. e. work/studies/retirement 2. a. "Swollen entire finger or toe" b. "Tender or swollen tendon".