SAT0454 FINGER FLEXOR TENDON PULLEY COMPLEX INVOLVEMENT IN PSA: AN HIGH RESOLUTION ULTRASONOGRAPHIC STUDY

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Background: Psoriatic Arthritis (PsA) is often associated with hand involvement including synovitis and tenosynovitis and dactylitis. At the micro anatomical level PsA is strongly linked to disease localisation to entheses and other sites of high mechanical stressing. Recently high resolution MRI has shown prominent abnormalities at the mini-entheses of the flexor tendon pulleys, a site of high physical stressing during finger flexion

Objectives: This study tested the hypothesis that sonographic abnormalities were common at the hand flexor tendon mini-entheses in PsA including the A1, A2 and A4 in patients without active hand arthritis or dactylitis at the moment of ultrasound (US) scanning

Methods: Consecutive patients affected by psoriasis (PsO) (23 cases), PsA (17) and healthy controls (HC) (19) were collected. The demographic charateristics are shown in Table 1. The cases were matched for sex, age and BMI. We excluded PsA patients with active arthritis or dactylitis at the moment of US study, the majority being under therapy with conventional DMARDs. The 2nd to 4th flexor tendons of the dominant hand were scanned with a high resolution linear probe (10–22 MHz) using an Esaote MyLab Twice machine. The sonograrapher was expert in muscolo skeletal ultrasound (MSKUS) and was blinded to the clinical details.The following changes were scored: tenosynovitis, A1, A2 and A4 pulley tendon thickness and pseudotensynovitis (peritendinous oedema). Pulleys were explored with transverse e longitudinal scan

Results: The A1, A2 and A4 pulleys were significantly thicker in PsA compared to PsO and healthy controls measuring both longitudinal and transverse scan (table 2 shows mean±SD value of transverse measures).In PsA patients A1, A2 and A4 pulleys thickness were above than the 95th percentile of HCs values respectively in 84%,80% and 100% of cases.Considering HCs and PsA we found that having a A1 thickness over the 95th percentile of HCs shows a sensibility of 82% and specificity of 100% for PsA. Using ROC curve analysis we found that the presence of one A1 thickness over the 95th percentile of HCs have a sensibility of 82% and specificity of 100% for PsA. Peritendinous oedema evaluated scanning the palmar side of proximal and intermediate phalanx was common in PsA patients (6/17) and absent in PsO and HCs

Table 1 Demographic data

	Healthy (n 19)	PsO (n 23)	PsA (n 17)
M/F	7/11 (39%61%)	9/14 (40%60%)	12/5 70%30%
Age (y) med ± SD	57±12	56±9	56±6
BMI med ± SD	25.5±4.0	25.9±3.2	28±3
Nail involvment	0	1 (4%)	8 (47%)
Previous dactylitis	0	1 (4%)	8 (47%)
MS >30'	0	0	9 (53%)
Previous trigger finger	0	7 (32%)	8 (47%)

Table 2 Transverse measures of pulleys thickness (mm)

	PsA	PsO	HCs
A1	0.61±0.15	0.40±0.10	0.33±0.08
A2	0.56±0.11	0.40±0.10	0.34±0.07
A4	0.50±0.13	0.33±0.05	0.30±0.02

Conclusions: This study suggests that PsA cases have a much higher burden of abnormalities in the mini-entheses of the flexor tendons on the hand. With the improving resolution and capabilities of MKUS these findings may be relevant to understand the involvment of flexor tendon in PsA expecially in sites with high mechanical stressing. Measuring A1, A2 and A4 thickness could be useful in detecting PsA cases without clinical signs of sinovitis or dactylitis

Disclosure of Interest: None declared

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SAT0455 IMPACT OF PSORIATIC ARTHRITIS IN THE WORKPLACE: RESULTS OF THE FRENCH SURVEY PSOPRO

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Objectives: The PsoPRO (Psoriasis & PROfessional life) survey, run under the aegis of the patient advocacy groups France Psoriasis, was aimed at measuring, in comparison to the general population, the impacts of psoriasis occurring alone (PsO) or concurring with psoriatic arthritis (PsO+PsA) on patients' working life.

Methods: From 13/07/16 to 08/08/16, 714 PsO patients, 81 of whom were under systemic treatment (PsO-ST), and 84 patients PsO+PsA were surveyed using a questionnaire drawn up by a multi-disciplinary scientific committee and conducted via the Internet. In addition to medical and professional characteristics, patients provided their recent absenteeism and presenteeism data, using a WPAI-PSO standardized self-questionnaire, as well as information about the interactions between psoriasis and their working life. Using the Student, Chi-deux and Fischer tests, patients were compared with a sample of 604 working respondents representative of the French population and questioned about the impact of possible health problems on their working life.

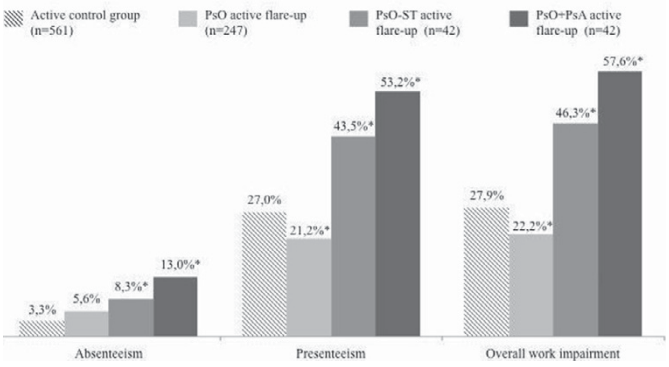
Results: The socio-demographic characteristics of the control group were similar to those of the total patient population with psoriasis, although men were slightly over-represented in the latter group. The duration of disease and cutaneous and rheumatismal locations were in line with those usually found in the literature. The unemployment rate over the previous 5 years and number of days of medical leave over the previous 12 months was higher in the PsO+PsA group as compared to the control group (Table 1). In the sub-group reporting a flare-up at the time of the survey, the impact of the disease on absenteeism, presenteeism and productivity was significantly higher in PsO-ST and PsO+PsA patients (Figure 1). Despite this, PsO-ST and PsO+PsA patients reported greater attachment to their work than did those in the control group (Table 1).

Table 1. Impact of psoriasis and psoriatic arthritis on functioning in the workplace and attachment to work

	Control group	PsO	PsO-ST	PsO+PsA
Unemployment over the past 5 years, % (n)	31 (187)	34 (243)	41 (33)	57* (42)
Number of days of medical leave over past 12 months, n	11	6	6	17*
Work considered more important than other aspects of life, % (n)	8 (45)	10 (62)	28* (20)	25* (17)
Work considered less important than other aspects of life % (n)	42 (236)	49* (301)	21* (15)	27* (18)

*p<0.05 versus control group respondents. PsO: psoriasis; PsO-ST: psoriasis under systemic treatment; PsO+PsA: psoriasis and psoriatic arthritis.

Figure 1: Impact of psoriasis and psoriatic arthritis on absenteeism, presenteeism and productivity over the past 7 day based on WPAI-PSO scores.
* p< 0.05 versus control group respondents PsO: psoriasis; PSO-ST: psoriasis under systemic treatment; PsO + PsA: psoriasis and psoriatic arthritis



Conclusions: In patients with PsO, placement under systemic treatment or the co-existence of PsA appears to be associated with greater impact on patients' working life, though they also reported higher attachment to their work. Close supervision and appropriate care in PSO patients developing PsA should limit these impacts.

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SAT0456 THERAPY MODIFICATIONS AMONG PATIENTS WITH PSORIATIC ARTHRITIS TREATED WITH A BIOLOGIC IN THE UNITED STATES – DESCRIPTIVE ANALYSES FROM AN ADMINISTRATIVE CLAIMS DATABASE

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Background: Biologic therapy used for the treatment of active psoriatic arthritis (PsA) can sometimes be augmented by adding non-biologic medications and/or

escalating the dose of the biologic therapy. Limited data exist on how theses therapy modifications are used in patients with PsA receiving biologic treatment in real-world settings.

Objectives: To describe therapy modifications (adding non-biologic medications or dose escalation of the current biologic therapy) in patients with PsA receiving biologic therapy in the United States.

Methods: This study used US administrative claims data from the Optum Research Database. Adults with PsA who newly initiated (no evidence of use in the 12 months prior) a biologic between January 1, 2013 and January 31, 2015, and were continuously enrolled in a commercial or Medicare Advantage health plan 12 months before (baseline period) and 15 months following the index date, defined as the date of first pharmacy fill or medical infusion, were included. To reduce confounding by patients with an early switch/discontinuation, therapy modifications were identified only in those patients who persisted with their index biologic for >90 days. Therapy modifications identified included initiation of add-on medications (disease-modifying antirheumatic drugs [DMARDs], nonsteroidal anti-inflammatory drugs [NSAIDs], opioids, corticosteroids, antidepressants, anxiolytics, sleeping aids and topical analgesics) after the first 90 days of persistence, and dose escalation of the index biologic. Dose escalation was defined as a patient receiving a dose >10% above the reference dose from the product label for ≥90 days.

Results: Of the 1,010 patients included who persisted on their index biologic for >90 days, 80.5% initiated a subcutaneous tumor necrosis factor inhibitor (TNFi-SC; adalimumab, certolizumab pegol, etanercept or golimumab) as their index biologic, 12.0% initiated an intravenous TNFi (TNFi-IV; infliximab) and 7.5% initiated ustekinumab. During the 12-month baseline period, patients had a mean (standard deviation) number of claims of 2.9 (4.3) for conventional synthetic DMARDs (csDMARDs), 2.6 (5.0) for opioids, 2.2 (3.1) for NSAIDs and 2.0 (2.9) for corticosteroids. Overall, 45.5% of patients received ≥1 additional medication during the period from 90 days after the index date to the end of persistence with the index biologic or immediate 12-month post-index period. The most commonly added medications were corticosteroids (22.0%), opioids (17.1%), NSAIDs (12.9%) and csDMARDs (5.3%) (Table 1). Overall, 9.6% of patients had a dose escalation of the index biologic (33.9% for TNFi-IV, 6.4% for TNFi-SC and 5.3% for ustekinumab) in the immediate 12-month post-index period.

Table 1. Add-on medications initiated from 90 days after the index date to the end of persistence or 12 months among patients with PsA

Add-on Medication, n (%)	Total (N = 1010)	TNFi-SC* (n = 813)	Infliximab (n = 121)	Ustekinumab (n = 76)
Any medication	460 (45.4)	353 (43.4)	62 (51.2)	45 (59.2)
Corticosteroid	222 (22.0)	168 (20.7)	37 (30.6)	17 (22.4)
Opioid	173 (17.1)	126 (15.5)	20 (16.5)	27 (35.5)
NSAID	130 (12.9)	105 (12.9)	14 (11.6)	11 (14.5)
csDMARD	54 (5.3)	43 (5.3)	8 (6.6)	3 (3.9)
Antidepressant	49 (4.9)	34 (4.2)	8 (6.6)	7 (9.2)
Anxiolytic	48 (4.8)	34 (4.2)	10 (8.3)	4 (5.3)
Topical analgesic	31 (3.1)	24 (3.0)	4 (3.3)	3 (4.0)
Sleeping aid	22 (2.2)	17 (2.1)	4 (3.3)	1 (1.3)
tsDMARD	11 (1.1)	9 (1.1)	0 (0.0)	2 (2.6)

csDMARD, conventional synthetic disease-modifying antirheumatic drug; NSAID, nonsteroidal anti-inflammatory drug; PsA, psoriatic arthritis; SC, subcutaneous; TNFi, tumor necrosis factor inhibitor; tsDMARD, targeted synthetic DMARD.
* TNFi-SC includes adalimumab, certolizumab pegol, etanercept and golimumab.

Conclusions: In this descriptive, administrative claims-based study, nearly one-half (≈ 45%) of patients with PsA receiving biologic therapy initiated an add-on medication, most of which were pain medications. Further research is needed to better understand the reasons for therapy modifications during biologic treatment and the impact of insufficient control of pain in patients with PsA in the United States.

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SAT0457 MIXED ANXIETY-DEPRESSIVE DISORDER (MADD) IN PATIENTS WITH PSORIATIC ARTHRITIS TREATED WITH BIOLOGICAL THERAPY

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Background: Psoriasis makes stress in patients and stress could play a role on the onset and exacerbation of psoriasis. Psoriasis and psoriatic arthritis (PsA) are associated with a variety of psychological problems, mainly anxiety and depression, although most of patients suffer from both anxiety and depressive symptoms of limited and equal intensity accompanied by at least some autonomic features and excluding severe anxiety and depressive symptoms (mixed anxiety-depressive disorder or MADD).

Objectives: The aim of this study was to describe the prevalence of MADD in clinical practice among PsA patients from our registry on treatment with biological therapy (bDMARDs) and to analyze their possible relation with characteristics of the disease or treatments in these patients.

Methods: We included all PsA patients (met CASPAR criteria) following treatment with bDMARDs and included in our regional registry (reference population 2.055.000). Was recorded the history of attending a mental health consultation since PsA diagnoses and before starting biologics therapy and if they were diagnosed as a mixed of anxiety and depression disorder (F41.2, ICD-10) and treated by non severe anxiety and depressive symptoms. We used for this analysis sex, age, disease duration, current bDMARDs with or without current co-medication with csDMARDs (methotrexate or leflunomide or sulfasalazine) and HLA-B27 status. Continuous variables were reported as mean ± standard deviation. Categorical variables were reported as percentages and frequencies. All analyses were performed using SPSS software. Differences were considered statistically significant if $p<0.05$ (two-tailed).

Results: We have registered 604 PsA patients who have been treated with bDMARDs. Three-hundred and twenty nine (54.5%) patients were men, mean age was 53.3±12.6 years and disease duration of PsA was 12.4±8.7 years. MADD was diagnosed in 99 patients (16.4%), and was more frequent in women than in men (21.1% vs 12.5%, p=0.004), with no differences in age of diagnosis and disease duration of PsA, nail disease, dactylitis, uveitis or HLA-B27. MADD was more prevalent in patients with enthesitis (31.9% vs 12.0%, $p<0.0001$) and PsA with axial involvement was associated with MADD (p=0.003). Etanercept (42%) and adalimumab (36%) were bDMARDs more used -56.2% with associated csDMARDs - and 67.9% of patients remained in the first biologic with a mean follow-up of 4.9 years. Infliximab was most used bDMARDs in patients with previous MADD (p=0.001).

Conclusions: Mixed anxiety-depressive disorder was more prevalent in women with PsA in our registry. It was associated more frequently with the axial disease, enthesitis and most use of infliximab like bDMARDs established in these patients.

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SAT0458 IDENTIFICATION OF GENETIC VARIATION SPECIFICALLY ASSOCIATED WITH PSORIATIC ARTHRITIS USING GENOME-WIDE ASSOCIATION STUDIES

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Background: PsA has a higher heritability than PsV, indicating the existence of additional PsA-specific genetic factors. To date, however, the specific genetic basis underlying PsA is poorly understood.

Objectives: The objective the present study was to identify new genetic variation specifically associated with PsA risk.

Methods: In order to characterize the genetic basis of PsA, we performed a GWAS meta-analysis at the single-marker level as well as at the pathway level (GWPA). A cohort of 835 PsA patients and 1,558 controls from the Spanish population was genotyped for >550,000 SNPs. GWAS data from a second cohort of 1,430 PsA patients and 1,417 controls from the North American population