Figure 1: Comparison of lymphocyte subsets in peripheral blood between healthy individuals (n=206) and PsA patients (n=218). Data were expressed as mean $\pm$ standard deviation to the distribution. Independent-samples T test was applied. PsA patients had higher absolute numbers of B, CD4⁺T, Th17 (A and B), decreased percentage of Th1 and Tregs (D), decreased absolute numbers of NK (A), and higher ratios of Th1/Tregs and Th17/Tregs compared with those of healthy controls (E). HC: healthy control. *P < 0.05, **P < 0.01, ***P < 0.001.

Figure 2: Changes of peripheral lymphocyte subsets after immunomodulatory combination therapy (n=112). Data were presented as mean $\pm$ SD and statistical analysis was performed using paired t-test (two-tailed). The absolute numbers of T, NK, CD8⁺T, Th1 and Tregs were significantly increased (A and B). The percentage of B, Th2 and Th17 were significantly decreased (C and D). The ratio of Th1/Tregs and Th2/Tregs had a tendency to decrease after treatment (E). *P < 0.05, **P < 0.01, ***P < 0.001.

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AB0796 PSORIATIC ONYCHOPATHY: MORE THAN MEETS THE EYE

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Background: Psoriatic onychopathy is an independent predictor of the onset of psoriatic arthritis (PsA). Assessment of nail disease is difficult given the limited utility of clinical assessment tools for the nail.

Recently, ultrasound (US) proved to be informative in the assessment of nail involvement.

Objectives: We aimed to describe morphologic ultrasonographic nail disease changes and to look for correlations between these features and the characteristics of the PsA.

Methods: The study included patients who met the CASPAR criteria for PsA. An US scan of patient's nails was performed in order to study the nail, matrix and skin thickness.

Results: We included 33 patients with PsA with a mean age of 51.2 $\pm$ 12.5 years. The mean DAPSA was 22.8 $\pm$ 19.7 (remission:9 patients, low activity: 5 patients, moderate activity: 11 patients and high activity: 8 patients).

Twenty-nine patients had a personal history of skin psoriasis, present in 64 % of the patients the day of the examination with a mean PASI of 2.76 $\pm$ 3.9.

Eleven patients (33.4%) presented with psoriatic onychopathy (45 fingernails) with a mean mNAPSI of 14.1 $\pm$ 16.

The most common patterns of nail involvement were:

Oil-drop patches (5 fingernails), pitting (4 fingernails), onycholysis (3 fingernails), crumbling (3 fingernails), subungual hyperkeratosis (2 fingernails), leukonychia (2 fingernails), paronychia (2 fingernails), splinter hemorrhages (1 fingernail).

We scanned 330 fingernails. The US study revealed dystrophy in 75 nails (22.7%) of the nails, in 17 patients (51.5%): Undulations or pitting (n=47), followed by disappearance of the anechoic space (n=38) and anechoic ventral nail plate (n=18).

The mean thickness of skin, nail plate and nail matrix region were 2.25 $\pm$ 0.32 mm, 0.38 $\pm$ 0.07 mm and 1.89 $\pm$ 0.33, respectively.

We found a positive correlation between nail plate thickness and both skin and nail matrix region thickness (r=0.561, p=0.001 and r=0.523, p=0.002).

Skin, nail and nail matrix thickness were significantly higher in men and in smokers. Manual workers did not have greater skin, nail plate nor nail matrix thickness.

There were no correlations between disease activity evaluated by the ASDAS-CRP, DAS28, PASI, ESR or by CRP and any of the US parameters.

In contrast, there was a significant negative correlation between psoriatic disease duration and nail plate thickness (r=-0.372, p=0.036).

Conclusion: Ultrasound offers an appropriate alternative for the evaluation of the nail unit. In our study it was able to detect subclinical involvement of the nail in 30 fingernails and in two patients.

Disclosure of Interests: None declared

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AB0797 ULTRASONOGRAPHIC ASSESSMENT OF ENTHESEAL INVOLVEMENT IN PSORIATIC ARTHRITIS

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Background: Enthesal involvement is a frequent and distinctive feature of psoriatic arthritis (PsA), often under diagnosed. It is especially associated with nail involvement. Because clinical examination is not sensitive enough for the detection of early signs of this involvement, US may be considered as an alternative imaging technique in the diagnosis of enthesopathy.

Objectives: The aim of the present study is to evaluate US entheses abnormalities in PsA and their correlation with clinical characteristics

Methods: The study included patients diagnosed with PsA according to the CASPAR criteria. They underwent a thorough clinical examination with special regard to the presence of enthesitis using the Spondyloarthritis Research Consortium of Canada (SPARCC) Enthesitis Index.

The US study bilaterally explored entheses at six sites: proximal plantar fascia, distal Achilles tendon, distal and proximal patellar tendon insertion, distal quadriceps tendon and distal brachial triceps tendon. We evaluated the following elemental lesions of enthesitis at each site: thickness and structure of the tendon, calcifications, bursae, erosions, power Doppler signal in bursa or enthesitis full tendon.

Results: Of the 33 patients, 39.4 % were male. The mean age was 51.2 $\pm$ 12.5 years. The mean disease duration was 13.5 $\pm$ 10.2 years.

The mean DAPSA was 22.8 $\pm$ 19.7 [0.1-84.5]: remission(n=9), low activity (n=5), moderate activity (n=11),high activity(n=8).

At inclusion, 11 patients (33.4%) patients presented with psoriatic onychopathy (45 fingernails) with a mean mNAPSI of 14.1 $\pm$ 16. Out of the 528 enthesal sites, 92 were tender at the palpation (17.4%) with a mean SPARCC at 2.87.

A total of 396 enthesal sites were examined by US. In 140 of them (35.35%), US found at least 1 sign indicative of enthesopathy. The most affected tendon was the distal Achilles tendon (42/396), followed by proximal plantar fascia (32/396), distal patellar tendon (20/396), quadriceps tendon (20/396), distal brachial triceps tendon(14/396) and finally proximal patellar tendon (12/396).

The most common elemental lesions were enthesophytes (176), erosions (114) and calcifications (50).

We found a positive correlation between age and both calcification (r=0.4, p=0.021) and enthesophytes (r=0.479, p=0.005).

We found a positive correlation between enthesophyte and the tender and swollen joints count (r= 0.352, p=0.045, r=0.378, p=0.03) and the SPARCC score (r=0.397, p=0.022).

Patients with higher BASDAI had thicker tendons (r=0.355, p=0.05).

Patients with nail dystrophy had more bursitis and erosions.

US scores did not correlate with sexe, disease duration and disease activity measures (ASDAS, DAPSA, DAS28 and PASI). Patients with subclinical enthesal involvement didn't have higher inflammatory biomarkers (ESR, CRP).

Conclusion: US subclinical enthesopathy are not rare in psoriatic arthritis, in particular in patients with active disease.

Clinical nail involvement was associated with bursitis and erosions. New studies including larger study groups are required to verify the findings of the present study

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AB0798

EFFECT OF ANTIRHEUMATIC THERAPY ADMINISTERED IN ACCORDANCE WITH "TREAT TO TARGET" PRINCIPLES ON DIASTOLIC DYSFUNCTION OF THE LEFT VENTRICLES IN PATIENTS WITH ACTIVE EARLY PSORIATIC ARTHRITIS

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Background: Psoriatic arthritis (PsA) are chronic inflammatory diseases, with massive increase of cardiovascular events (CVE) and cardiovascular death. Diastolic dysfunction of the left ventricles (LVDD) is a risk factor for the development of the heart failure.

Objectives: to study the effect of antirheumatic therapy administered in accordance with "Treat to target" principles on LVDD in early PsA (EPsA) patients (pts).

Methods: 48 (F-23) DMARD-naïve PsA pts, according to the CASPAR criteria, age 36[27; 45] years (yrs.), PsA duration – 6[4; 8] months. All pts were assessed for transthoracic echocardiography. Diastolic function was determined by early and atrial peak filling rates derived from differential volume-time-curve analysis. Methotrexate therapy was started in all pts with an escalation of the dose up to 25 mg/week subcutaneously. In case of no remission 3 months later, MT was added with biologic therapy: Adalimumab, Certolizumab pegol, Ustekinumab. Antihypertensive therapy received all pts with arterial hypertension (AH). All p less than 0.05 considered to statistical significance.

Results: At baseline LVDD was identified in 5 (10.4%). The LVDD pts were older, in more cases they had AH, abdominal obesity (p<0.05). Significant negative correlations were found between LVDD and body mass index (BMI) (r=-0.41), age (r=-0.71), total cholesterol (r=-0.44), triglycerides (r=-0.48), low density lipoproteins (r=-0.44), systolic (r=-0.59) and diastolic blood pressure (r=-0.4), for all p<0.01. By 18 months of therapy significantly decreased DAS from 4.06[3.48; 4.91] to 0.97[0.65;1.48]; C-RP from 19.4 [8.8;37.5] to 2.2 [0.9; 4.6]mg/l, for all p<0.001. DAS remission was achieved in 69% of pts. We didn't find significant differences between baseline and after treatment the frequency of LVDD – 5(10.4%) to 4(8.3%).

Conclusion: in pts with EPsA frequently (10.4%) were detected LVDD, which are associated with a AH, age, higher BMI. Low prevalence LVDD in patients with EPsA is possibly caused by short duration of disease and early start of antirheumatic therapy. This has implications for development of preventive strategies for heart failure in EPsA patients.

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AB0799

REAL-WORLD EXPERIENCE OF SECUKINUMAB FOR PSORIATIC ARTHRITIS WITH AXIAL INVOLVEMENT.

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Background: Evidence on the efficacy of biologics in the treatment of psoriatic arthritis (PsA) patients with axial manifestations affecting 30-70% of PsA patients is limited. Secukinumab (SEC) has provided significant and sustained improvement in the signs and symptoms of active PsA and ankylosing spondylitis.

Objectives: This study aims to analyze the experience of using SEC for PsA patients with axial involvement in real-world setting.

Methods: Multicentric observational, longitudinal, retrospective study conducted in a tertiary hospital between January 2016 and December 2019. Patients with PsA (CASPAR criteria) and clinical and/or image diagnosis of axial involvement receiving at least one dose of SEC were

Table 1. Disease activity assessment at 6 months of secukinumab therapy.

	Baseline	6 months after SEC	Mean difference	P value
SJC	4,8±5,4	1,9±3,1	-2,8 (IC95% -3,9 a -1,7)	p<0,0001
TJC	7,7±5,8	3,9±4,1	-3,8 (IC95% -5,1 a -2,4)	p<0,0001
Spinal pVAS	6,1±3,2	4,2±2,9	-1,9 (IC95% -2,4 a -1,4)	p<0,0001
CRP (mg/L)	7,7±9,9	4,9±5,9	-2,9 (IC95% -4,5 a -1,2)	p=0,0009
ASDAS-CRP	2,5±1,9	1,8±1,3	-0,7 (IC95% -0,9 a -0,4)	p<0,0001
DAPSA	27,7±12,1	16,7±10,4	-11 (IC95% -15,3 a -6,8)	p<0,0001

SJC: swollen joint count, TJC: tender joint count, Spinal pVAS: spinal pain visual analog scale, CRP: C-reactive protein, SEC: secukinumab.

included. Patients with non-pathological sacroiliacs x-ray and MRI had to have spinal pain VAS ≥4/10 after failure to NSAIDs, prior to the onset of SEC, to be included. Medical records were reviewed to collect demographic and clinical data, features of PsA (manifestations, treatments and activity assessment). Descriptive statistics and then a comparative analysis with the Student *t*-test to analyze the effectiveness of SEC were performed.

Results: Of 98 PsA patients treated with SEC, 58 (59.2%) had axial involvement, of which 41 (71%) female. Mean age was 54 y.o (SD 10) and average duration of the disease was 10 years (SD 8). All 58 patients had peripheral disease (33% joint erosions), 55 (95%) had psoriasis, 20 (34%) showed dactylitis and 39 (67%) had enthesitis. Sacroiliacs x-ray was damaged in 38 (66%) patients (grade I-IV) and 23 (40%) pathological MRI, with HLAB27+ at 8 (14%) patients. Average BMI was 29 (SD 8), with an obesity rate of 33% (19 pt). Observed comorbidities were hypertension (27 pt, 47%), diabetes mellitus (6 pt, 10%), dyslipidemia (23 pt, 40%), active smoking (18 pt, 31%) and malignancy (6 pt, 10%). Regarding previous treatments, 90% had received cDMARDs, particularly methotrexate (86%) and 40 (69%) had been exposed to at least one bDMARD (15 pt to one, 9 to two, 6 to three and 10 to four or more). 7 patients were on 300mg dose and 51 patients on 150mg dose (dose escalation to 300mg was performed in 16 patients and 44% respond and maintain SEC). Average drug survival time was 1.4 (SD 1) years. At 6 months of SEC therapy, tender and swollen joint count, spinal pain VAS, CRP, ASDAS-CRP and DAPSA had significantly decreased (Table 1). 29 (50%) patients suspended SEC during follow-up due to primary ineffectiveness (8), secondary ineffectiveness (16), adverse events (3), latex allergy (1) and remission (1). Adverse events do not differ from those reported in clinical trials.

Conclusion: Secukinumab in real-world setting provided improvements in the axial and peripheral manifestations of PsA, using both the 150mg and 300mg doses.

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AB0800

CLINICAL ASSOCIATION BETWEEN URIC ACID/25-HYDROXYVITAMIN D SERUM LEVELS RATIO IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: The association between hyperuricemia and psoriatic arthritis (PsA) is actually generally accepted. Previous studies have demonstrated that uric acid suppress 25(OH)D metabolism [1]. More evidence is required to demonstrate the immune modulatory effects in psoriasis, psoriatic arthritis and other autoimmune diseases. In particular, the potential association between 25-hydroxyvitamin D serum levels and PsA still remains unknown.