dl; $p=0.04$). Compared to AS group, PsA patients were characterised by higher IL-18 (235 vs 208 pg/ml; $p<0.05$) but lower OPG (815 vs 1660 pg/ml; $p<0.05$) serum levels. In PsA patients without CHD, serum OPG positively but moderately correlated with LDL ($r=0.3$; $p=0.05$), TG ($r=0.43$; $p=0.007$) and AI ($r=0.45$; $p=0.004$). Moreover, in this PsA patients subgroup we confirmed previously observed¹ inverse correlation of IL-18 with HDL levels ($r=-0.34$; $p=0.05$) and positive correlation of this cytokine with both TG levels ($r=0.37$; $p=0.04$) and AI values ($r=0.53$; $p=0.002$). Interestingly, similar but stronger associations of IL-18 with HDL levels ($r=-0.88$; $p=0.004$) and AI values ($r=0.88$; $p=0.004$) were presently found in PsA patients with accompanied CHD. Consistently with our previous report,¹ we failed to find any correlations between CV risk, lipid profile, and tested cytokines serum concentrations in patients with AS.

Conclusions: We report that in PsA, but not AS, patients serum IL-18 and OPG concentrations are correlated with an altered and pro-atherogenic lipid profile. These associations are stronger in patients with concomitant CHD. Thus, present results explain partially the way by which these cytokine contribute to CV complications in PsA.

REFERENCE:

- [1] Kontny E, et al. Association of serum osteoprotegerin and IL-18 concentrations with cardiovascular risk in ankylosing spondylitis and psoriatic arthritis. *Ann Rheum Dis* 2017;76(suppl 2):1310–1311 AB0733.

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SAT0311

PREVALENCE AND FACTORS RELATED TO INAPPROPRIATELY HIGH LEFT VENTRICULAR MASS IN PATIENTS WITH PSORIATIC ARTHRITIS WITHOUT OVERT CARDIAC DISEASE

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Background: Early cardiovascular (CV) involvement has been found in patients with psoriatic arthritis (PsA). These patients may have a high prevalence of subclinical left ventricular (LV) dysfunction, even without established CV disease and in the absence of traditional CV risk factors. However, currently, the factors associated with LV dysfunction in PsA are unknown. Patients with inflammatory disorders are exposed to the development of excessive left ventricular mass disproportionate to the need to compensate left ventricular load, a condition named 'inappropriately high left ventricular mass' (iLVM). Previously, we have shown that iLVM is associated with unfavourable prognosis in patients with rheumatoid arthritis independent of traditional CV risk factors.

Objectives: In this cross-sectional study, we assessed the prevalence and factors associated with iLVM in a cohort of patients with PsA and tested the hypothesis that PsA is *per se* related to iLVM.

Methods: We evaluated 101 non-institutionalised patients >18 years of age diagnosed with PsA according to CASPAR criteria and consecutively recruited between March 2014 and December 2016. All PsA patients were free of symptoms or signs of cardiovascular disease. Patients with PsA were compared with 101 controls matched for age, sex, BMI, prevalence of hypertension and diabetes. Left ventricular chamber dimensions and wall thicknesses were measured according to the American Society of Echocardiography guidelines and predicted LVM was calculated using a validated equation considering height, sex and left ventricular work. iLVM was defined as measured/predicted LVM ratio above the 95% percentile of a reference population of healthy controls.¹

Abstract SAT0311 – Table 1. Variables significantly related to iLVM in the entire study population (101 patients with PsA and 101 matched controls).

Predictors	OR	95% CI	P value
Psoriatic arthritis	6.91	2.80–17.06	<0.001
Waist circumference	1.04	1.00–1.07	0.047
Dyslipidemia	0.85	0.39–1.89	0.696
Hypertension	1.29	0.56–2.96	0.547
Diabetes mellitus	2.42	0.60–9.79	0.214
Age	1.02	0.98–1.07	0.291
Sex (male)	1.27	0.57–2.84	0.559

Results: iLVM was detected in 58% of patients with PsA and 18% of controls ($p<0.001$). In multivariable logistic regression analysis considering only patients with PsA, the variables independently associated with iLVM were left ventricular

systolic dysfunction (LVSD) measured as mid-wall shortening and concentric left ventricular geometry. In multiple regression analyses considering the entire study population (patients with PsA and matched controls), the diagnosis of PsA was significantly associated with iLVM independent of traditional cardiovascular risk factors (OR 6.91, 95% CI 2.80–17.06, $p<0.001$; table 1).

Conclusions: More than 50% of patients with PsA have a disproportionate increase in their LVM. An inappropriately high LVM in PsA is associated with LV systolic dysfunction and LV concentric geometry.

REFERENCE:

- [1] Cioffi G, Viapiana O, Ognibeni F, Dalbeni A, Giollo A, Adami S, Gatti D, Russo G, Barbati G, Cherubini A, Di Lenarda A, Rossini M. Prevalence and factors related to inappropriately high left ventricular mass in patients with rheumatoid arthritis without overt cardiac disease. *J Hypertens* 2015;33:2141–2149.

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SAT0312

INCIDENCE OF INFECTIONS IN CLINICAL TRIALS OF TILDRAKIZUMAB FOR MODERATE TO SEVERE CHRONIC PLAQUE PSORIASIS

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Background: Risk of infections is a concern with cytokine inhibitor treatments.

Objectives: This analysis assessed infections during phase 2 and 3 trials of tildrakizumab (TIL), a high-affinity, humanised, immunoglobulin G1/κ monoclonal antibody against IL-23p19 under development for moderate to severe chronic plaque psoriasis.

Methods: Patients were randomised in P05495 (phase 2; NCT01225731), reSURFACE 1 (phase 3; NCT01722331), and reSURFACE 2 (phase 3; NCT01729754). In Part 1 (Weeks 1–16) of P05495, patients received subcutaneous (SC) TIL 5, 25, 100, or 200 mg or placebo (PBO) at Weeks 0 and 4 and were rerandomized to various TIL doses in Part 2 (Weeks 16–52). In Part 1 (Weeks 1–12) of reSURFACE 1 and 2, patients received SC TIL 200 mg, TIL 100 mg, or PBO at Weeks 0 and 4. Patients were rerandomized in Part 2 (Weeks 12–28) and Part 3 (Weeks 28–64 or –52 in reSURFACE 1 and 2, respectively). Etanercept (ETN) 50 mg was an active control in Parts 1–2 of reSURFACE 2. Treatment-emergent adverse event (AE) data pools (n=2081) for the PBO-controlled and full trial periods (52 weeks for P05495/reSURFACE 2; 64 weeks for reSURFACE 1) were analysed. Severe infections met the regulatory definition of a serious AE or required intravenous antibiotics.

Results: In the PBO-controlled period, incidences of infections were comparable for TIL 100 mg and 200 mg (23% and 22%, respectively) and PBO (23%); all were comparable with ETN (24%). Incidences of severe infections were low for all treatment groups (range, 0.0%–0.3%; $TIL \geq 0.6$ vs PBO). In the full trial period, exposure-adjusted rates (patients/100 patient-years) for infections with TIL 100 mg and 200 mg (48.9 and 52.6, respectively) were lower than with PBO and ETN (79.5 and 86.0, respectively). Exposure adjusted rates for severe infections were 1.10, 1.61, 1.96, and 0.91 for TIL 100 mg, TIL 200 mg, ETN, and PBO, respectively. In total, 33 severe infections were identified (respiratory: TIL 100 mg, 4 events; TIL 200 mg, 2 events; ETN and PBO, 0 events; skin: TIL 100 mg, 3 events; TIL 200 mg, 6 events; ETN, 2 events; PBO, 3 events; gastrointestinal: TIL 100 mg, 4 events; TIL 200 mg, 5 events; ETN and PBO, 0 events; urinary tract: TIL 200 mg, 1 event; ETN, 1 event; TIL 100 mg and PBO, 0 events). One patient had bone tuberculosis (TIL 200 mg; original purified protein derivative test was negative); 1 sepsis event (TIL 200 mg) occurred months after ending TIL treatment.

Conclusions: Infection rates with TIL treatment were low and comparable to PBO and ETN during the PBO-controlled period. By Weeks 52/64, exposure-adjusted rates remained low for all groups.

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SAT0313

LIPID PROFILE OF PSORIATIC ARTHRITIS PATIENTS. A FIVE-YEAR STUDY

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Background: Psoriatic arthritis (PsA) is an inflammatory arthritis associated with psoriasis. Many studies have shown alterations in lipid profile of PsA patients and an association with increased cardiovascular risk.

Objectives: To evaluate the changes of lipid profile in PsA patients treated with conventional synthetic disease modifying anti-rheumatic drugs (csDMARDs) and/or with biological DMARDs (bDMARDs) in a five-year period.

Methods: We studied 254 patients diagnosed with PsA according to CASPAR and ASAS (for those with axial disease) criteria. Patients were followed up at pre-defined time points [baseline, 24 weeks (wks), 48 and 240 wks after initiation of treatment. We recorded levels of Total Cholesterol (CHOL), Low Density Lipoproteins (LDL), High Density Lipoproteins (HDL) and Triglycerides (TGL). The disease activity was assessed by using Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI), disease activity score-28 (DAS) -C-Reactive Protein (CRP), DAS28-erythrocyte sedimentation rate (ESR), Health Assessment Questionnaire (HAQ), and inflammatory marker CRP and ESR. Patients were categorised in three treatment groups: patients treated with bDMARDs: anti-tumour necrosis factor alpha (TNFα) agents, patients treated with csDMARDs and combined therapy (bDMARDs and csDMARDs). Disease Phenotype and epidemiological features of PsA patients were also recorded.

Results: There were 137 male and 117 female patients. The (Mean ±SD) age of the patients was 56,11±14,64 years and the body mass index (BMI) was 27,86 ±5,12. Thirty-nine per cent of the patients presented as asymmetric oligoarthritis, 25,6% as symmetric polyarthritis while 27,6% had axial involvement with or without peripheral arthritis. Total CHOL and LDL levels were significantly associated with disease duration (p<0,05) while TGL and HDL were not significantly correlated. We found that HDL levels were significantly correlated with disease activity through time. More specific lower disease activity was associated with higher HDL levels for all disease activity scores and CRP at all time points (p<0,05). The significance was lost only for ESR. No association was found between the HDL levels and the different therapeutic option used. The rest of lipid profile levels did not show statistical significant association with disease activity at any time point for all disease activity indexes, including CRP and ESR.

Conclusions: Lipid profile of PsA patients seems to improve with better control of disease activity. More specifically high HDL levels are associated with low disease activity and these changes appear to be independent of the therapeutic choices.

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SAT0314

TO DESCRIBE AND CHARACTERISE THE PATIENT GROUP DEFINED AS COMPLEX IN A JOINT RHEUMATOLOGY/DERMATOLOGY CLINIC (PAIDER)

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Objectives: To describe and characterise the patient group defined as complex in a joint Rheumatology/Dermatology clinic (PAIDER).

Methods: We performed a retrospective chart review of patients evaluated between May 2012 and November 2017 at a weekly joint Rheumatology/Dermatology clinic at Hospital de Sant Pau (Autonomous University of Barcelona), Spain. We reviewed the medical records for demographic information, source of referral, complexity, cardiovascular risk factors and the number of visits. Complexity or complex patient was defined by at least one of the following characteristics: liver disease, neoplastic disease, psychiatric disorders, communication difficulties, adverse drug reactions to previous treatment, or paradoxical effects of biological therapy. The degree of complexity was a number (from 1 to 6) resulting from the sum of the previous characteristics. A descriptive analysis was carried out and the correlation between variables was studied through the application of nonparametric tests. The statistical package SPSS v. 21 was used to analyse the data.

Results: 494 patients were evaluated (52% women) with a total of 1110 visits. The mean age was 53 years. Patients were referred from Rheumatology, Dermatology, primary care physicians and other specialties in 47%, 40%, 6.5% and 5.5% of cases, respectively. The average number of visits per patient was 2.25. 164 patients (33%) were defined as complex with a total of 546 visits. 48.8% were women. The mean age was 55 years. They were referred from Rheumatology, Dermatology, primary care physicians and other specialties in 50.6%, 35.4%, 7.3% and 6.7% of cases, respectively. The mean number of following-up visits for the complex patients was 3.33.

The features that defined complexity and the number of visits required are shown in table 1.

Complexity features	Number of patients	Visits Mean±SD
Liver disease	47/164 (28.7%)	3.6±3.7
Psychiatric disorder	47/164 (28.7%)	3.4±4.7
Adverse drug reactions	46/164 (28%)	4.7±5.2
Paradoxical effects of biological therapy	37/164 (22.6%)	5.2±5.7
Neoplastic disease	27/164 (16.5%)	1.8±1.5
Communication difficulties	19/164 (11.6%)	4.1±4.9

The number of visits according to the degree of complexity is shown in table 2.

Degree of complexity	Number of patients	Visits Mean±SD
1	120/164 (73.2%)	2.8±2.9
2	32/164 (19.5%)	4.1±4.1
3	10/164 (6.1%)	6.4±7.3
4	1/164 (0.6%)	1
5	1/164 (0.6%)	1
6	0/164 (0%)	0

The complexity features that had a significant correlation with the number of visits were liver disease (p<0.001), serious adverse effects to previous treatments (p<0.001) and paradoxical effects of biological therapy (p<0.001). The degree of complexity was also correlated with the number of visits (Spearman's Rho=0.262, p<0.001).

Conclusions: A third of the patients visited in our joint clinic were defined as complex, although the great majority showed a low level of complexity. Of all the features used to define complexity, only a few were associated with a greater number of visits. However, the degree of complexity of the patients was associated with an increased number of visits.

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