Conclusions: Obesity was more common among our patients with cutaneous psoriasis than in those with arthritis. The model that best explains obesity in this PsA series combines genetic factors (PsA family history), together with factors specific to the metabolic syndrome (dyslipidemia), with others owned to arthritis (axial evolution).

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THU0331 RELATIONSHIP BETWEEN THE NAIL ULTRASONOGRAPHIC EVALUATIONS AND CLINICAL FEATURES IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: Nail ultrasonography (US) is a favourable visualisation method to evaluate the subunits of the nail. Little is known about the relation between the properties of nail structures and the clinical characteristics of patients with psoriatic arthritis (PsA).[1]
Objectives: To show the relationship between the clinical features and ultrasonographic evaluations of the nail in patients with PsA.
Methods: Patients with PsA according to the CASPAR criteria were recruited into the study. All of the hand nails and toenails were examined by grayscale and power Doppler techniques. The relations between the characteristics of the patients and the sonographic findings of the nail structures were assessed. Concerning to patient characteristics, subtypes of PsA, gender, age, height, BMI, working status, smoking, PsA duration, psoriasis duration, history of dactylitis, history of uveitis, number of tender and swollen joints, Maastricht Ankylosing Spondylitis Enthesitis Score, CRP, disease activity, haemoglobin, sacroiliitis, inspectional nail involvement (INI), Nail Psoriasis Severity Index (NAPSI), PASI, HAQ, quality of life, and the biologic treatment were recorded. The nail plate thickness (NPT), number of nails with trilaminar irregularity (NTI), nail bed thickness (NBT), and the doppler activity score (DAS) were recorded as the sonographic nail findings. The Kruskal Wallis analysis, Spearman's correlation, and Man Whitney U tests were used in statistical analysis. p<0.05 was accepted as significant.
Results: 63 patients (756 nails) were evaluated. Among the PsA subtypes, 38% of patients were asymmetrical oligoarticular arthritis, 38% were symmetrical polyarthritis, 7.9% distal interphalangeal arthropathy, and 15.8% predominant spondylitis. All of the ultrasonographic nail parameters were independent of the PsA subtypes (p>0.05). The mean of NPT was higher in males and correlated with age, height, and the haemoglobin levels. The NTI score was higher in patients with INI and correlated with the NAPSI score. The mean of NBT was only correlated with the haemoglobin levels. The DAS was higher in workers and correlated with age and the NAPSI score. The other clinical parameters were not associated with the sonographic findings.

Abstract THU0331 – Table 1. Relationships between the patients' characteristics and the ultrasonographic parameters*

US nail parameters	Gender	Worker	INI	Age	Height	NAPSI	Hemoglobin
NPT (mm)	p=0.002			p=0.001 rho:0.396	p=0.021 rho:0.290		p=0.021 rho:0.292
NTI (0-12)			p<0.0001			p<0.0001 rho:0.668	
NBT (mm)							p=0.012 rho:0.316
DAS (0-48)		p=0.042		p=0.001 rho:-0.407		p=0.006 rho:0.344	

(US: ultrasonography, INI: inspectional nail involvement, NAPSI: nail psoriasis severity index, NPT: nail plate thicknes, NTI: nails with trilaminar irregularity, NBT: nail bed thickness, DAS: doppler activity score. *Only parameters which have statistical significant relations by Mann Whitney U test and Spearman's correlation).

Conclusions: The ultrasonographic findings of the nail structures were determined in PsA. These findings did not differ among the subtypes of the disease. Although the sonographic nail findings were not associated with the most of the clinical parameters; they had significant relations with some demographics, inspectional nail involvements, and haemoglobin levels in PsA.

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THU0332 FATIGUE REMAINS A DOMINATNG SYMPTOM DESPITE TUMOUR NECROSIS FACTOR INHIBITOR THERAPY IN PSORIATIC ARTHRITIS: A POPULATION-BASED COHORT STUDY

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Background: Psoriatic arthritis (PsA) is a chronic inflammatory disorder associated with fatigue, pain and impaired function. Tumour necrosis factor inhibitor (TNFi) therapy fails among half of patients with PsA treated in routine care.
Objectives: The objective of this population-based cohort study was to investigate the association of fatigue with disease activity and adherence to therapy in PsA patients receiving their first TNFi.
Methods: Data on patient characteristics, disease activity and treatment adherence were obtained from the DANBIO register. Information on comorbidities according to the Charlson Comorbidity Index (CCI) and psychiatric comorbidities was obtained through linkage with the Danish National Patient Register. We performed Kaplan-Meier plots and univariate Cox proportional hazard regression analysis. Percentages of patients achieving relevant clinical responses were calculated.
Results: From 2006 thru 2016, we identified 880 patients eligible for analyses. Patients with upper median fatigue scores had statistically significantly higher disease activity measures, higher pain and HAQ scores, more comorbidities and current smoking status at baseline compared with patients with lower median fatigue scores (table 1). After treatment initiation the mean VAS fatigue score decreased from 62 mm (SD 25) to 44 mm (SD 30) at six months (p<0.001). Kaplan–Meier curves showed shorter adherence to treatment in patients with higher baseline fatigue scores compared with patients with lower fatigue scores (HR 1.43 [1.2 to 1.7], p<0.001) (figure 1). ACR20, 50 and 70 responses at six months were 49%, 35% and 18% respectively. VASfatigue20, 50 and 70 responses were 57%, 39% and 20%, respectively. The kappa value between ACR20, 50, 70 and VASfatigue responses were 0.37, 0.40 and 0.48 (p<0.001), respectively.

Abstract THU0332 – Table 1. Baseline characteristics according to median fatigue stratification

	Lower median VAS fatigue (n=430)	Upper median VAS fatigue (n=450)	p value
Age, years	47.8 (39.4–57.3)	49.0 (40.0–56.1)	p=0.905
Male gender	51%	40%	p<0.001
DAS28-CRP (0–10)	4.0 (3.2–3.7)	4.8 (3.9–5.5)	p<0.001
HAQ score (0–3)	0.75 (0.38–1.13)	1.38 (0.88–1.75)	p<0.001
VAS patient pain (0–100)	45 (29–62)	74 (63–84)	p<0.001
BMI	26.8 (23.7–30.7)	27.7 (24.3–31.2)	p=0.118
Current smoking	28%	36%	p=0.034
Comorbidities (%)	66%	61%	p=0.049
CCI=0	27%	27%	
CCI=1	7%	12%	
CCI≥2			
Depression treated in hospital, n (%)	18 (4.2)	31 (6.8)	p=0.105

Values are the mean and SD except where stated otherwise. Comparisons were assessed by X^2/Mann-Whitney test. Lower median fatigue <64 mm, higher median fatigue ≥64 mm