Table 1. Comparison between the studied groups according to disease activity

	Group I (37)	Group II (23)	Test of Significance	P
	Mean $\pm$ SD		t	
CPDAI	8.68 $\pm$ 3.33 Median (Minimum – Maximum)	11.26 $\pm$ 2.03	3.735* U	<0.001*
PASI	8.3 (0 – 45.7)	14.4 (0.9 – 49.6)	292.5*	0.043*
DAPSA	29 (14 – 89)	45.5 (20.5 – 99)	226.0*	0.002*
C-reactive protein (mg/dl)	6.3 (0.3 – 72)	6 (0.8 – 61.6)	409.5	0.802
68 Tender joint count	7 (2 – 64)	23 (8 – 68)	112*	<0.001*
66 Swollen joint count	2 (0 – 23)	4 (0 – 10)	300.5	0.055
Leeds enthesitis index	2 (0 – 6)	6 (3 – 6)	76.5*	<0.001*
Dactylitic count	0 (0 – 8)	0 (0 – 7)	421	0.924

U: Mann Whitney test

t: Student t-test

p: p value for comparing between the studied categories

*: Statistically significant at $p \leq 0.05$

Patients in both groups had similar functional level by health assessment questionnaire (HAQ) (U=339, $p=0.188$) and QOL by PsAQOL (U=306, $p=0.068$). While, MAF was statistically higher in group II patients 34 ranging from 28 to 48.7 in group II vs 26.5 ranging from 0 to 49.5 in group I (U=172.5, $p<0.001$). In group II patients: the mean tender point count was 16.50 ± 1.84 , fibromyalgia severity scale (FSS) was 20.7 ± 3.99 and fibromyalgia impact questionnaire (FIQ) was 57.22 ± 7.30 . There was a statistically significant correlation between FSS and DAPSA ($r_s=0.59$, $p=0.003$), PsAQOL ($r_s=0.64$, $p=0.001$) and HAQ ($r_s=0.613$, $p=0.002$), and between FIQ and PASI ($r=0.488$, $p=0.018$), PsAQOL ($r=0.576$, $p=0.004$), HAQ ($r=0.557$, $p=0.006$) and MAF ($r=0.619$, $p=0.002$).

Conclusion: These results might highlight the importance of considering FM as a contextual factor in disease activity assessment in patients with PsA, especially in those with discrepancies in TJC/patients reported outcomes versus SJC/inflammatory markers or persistently high disease activity indices.

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Acknowledgments: Our sincere gratification to our mentor the late Prof. Dr. Abdel Moneim Helal.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.1509

AB0732

FATIGUE ASSESSMENT IN EGYPTIAN PSORIATIC ARTHRITIS PATIENTS: RELATION TO SERUM INTERLEUKIN 23, DISEASE ACTIVITY AND QUALITY OF LIFE.

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Background: Fatigue is a prevalent and fundamental phenomenon in psoriatic arthritis (PsA) patients. It often interferes with physical and social functions and may lead to social withdrawal, long-standing sick leave, disability and loss of work productivity. Fatigue is a prevalent symptom in patients with chronic rheumatic diseases. Cytokines as interleukin IL-23/17 play a pivotal role in the pathogenesis of PsA.

Objectives: To assess fatigue in PsA patients and determine its relation to serum IL 23 levels, disease activity, Skin severity, physical function and quality of life (QoL).

Methods: Fifty PsA patients and 46 matched healthy controls were included in this study. Skin severity based on the Psoriasis Area and Severity Index (PASI), the Disease Activity Index for Psoriatic Arthritis (DAPSA) and the Functional Assessment of Chronic Illness Therapy (FACIT-F) were assessed. Physical function was assessed by the Health Assessment Questionnaire Disability Index (HAQ-DI) and health-related QoL was assessed using the Short Form

Health Survey (SF-36), Psoriatic Arthritis QoL (PsAQoL) and the Dermatology Life Quality Index (DLQI). Serum IL-23 levels were measured in the studied groups.

Results: The study included 23 (46%) females and 27 (54%) males with a mean age of 42.78 ± 12.33 years. The mean serum IL-23 level was significantly higher in PsA patients (50.89 ± 13.86 pg/ml) than in controls (43.88 ± 6.34 pg/ml) ($p=0.006$). The FACIT score ranged from 2-41. Severe fatigue (score <30) was reported in 27 (54%) PsA patients. There were significant correlations between FACIT-F and (DAPSA, PASI, HAQ-DI, PsAQoL, DLQI and SF-36). No significant correlations could be detected between FACIT-F and serum levels of IL-23 and CRP.

Conclusion: Fatigue was a frequent complaint in PsA patients. There was a mutual negative impact between fatigue and each of PsA joint disease activity and physical function and it worsened the QoL. Fatigue was worsened with increased severity of skin PsO. Although serum level of IL-23 was significantly elevated in PsA patients than the controls, it wasn't correlated with fatigue score. Hence IL-23 can't be considered a biomarker for fatigue severity.

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Table. Correlation between FACIT-F score and different parameters in patients group

	FACIT-F	
	r_s	p
DAPSA	-0.365*	0.009*
PASI	-0.424*	0.002*
HAQ-DI	-0.464*	0.001*
PsAQoL	-0.633*	<0.001*
DLQI	-0.492*	<0.001*
SF-36	0.600	<0.001*
CRP	-0.167	0.247
Serum IL-23 levels	-0.183	0.204

r_s : Spearman coefficient, *: Statistically significant at $p \leq 0.05$

Figure. Correlation between FACIT-F and DAPSA in the studied PsA patients.

Acknowledgments: I am deeply indebted to my late Professor Abdelmoniem Helal for his expert guidance and keen interest throughout the work. Thanks to My parents and Husband.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.1560