Abstract AB0552 – Table 1

n (%)	Primary aPL/APS n=38	SLE aPL/APS n=57	p
Mean Age (min-max)	41.7±10.5 (24-65)	42.9±10.0 (19-70)	0.57
Female	28 (74)	47 (83)	0.3
Thrombosis	18 (47)	24 (42)	0.61
Arterial	4 (10)	4 (7)	0.55
Venous	9 (24)	15 (26)	0.77
Arterial and venous	4 (10)	4 (7)	0.55
Transient Ischemic Attack	3 (8)	7 (12)	0.49
Pregnancy Morbidity*	10 (26)	11 (29)	0.42
Non-criteria aPL Manifestations	18 (47)	30 (53)	0.12
Livedo Reticularis	6 (16)	6 (11)	0.45
Thrombocytopenia	7 (18)	12 (21)	0.75
Hemolytic Anemia	0	11 (19)	0.004*
Valvular Heart Disease	8/32 (25)	13/55 (24)	0.43
Chronic Skin Ulcer	2 (5)	3 (5)	1.0
Biopsy proven aPL nephropathy	2 (5)	2 (4)	0.68
White Matter Changes	3/25 (12)	11/46 (24)	0.23
Positive Lupus Anticoagulant	22/35 (63)	33/57 (58)	0.79
Positive aCL (≥40 GPL/MPL)	25/37 (68)	44/57 (77)	0.30
IgG	15/25 (60)	35/44 (80)	0.08
IgM	11/25 (44)	20/44 (46)	0.77
Positive aβ ₂ GPI (≥40 GPL/MPL)	7/23 (18)	10/37 (18)	0.77
IgG	6/7 (86)	7/10 (70)	0.45
IgM	3/7 (49)	6/10 (60)	0.48
Medications at Database Entry			
Aspirin	19 (50)	37 (65)	0.15
Warfarin	20 (53)	29 (51)	0.87
Hydroxychloroquine	14 (37)	55 (97)	0.000*

*Defined based on the Updated Sapporo APS Classification Criteria

Conclusions: The analysis of our multicenter aPL database demonstrates that the frequencies of thrombosis and pregnancy morbidity are similar between aPL-positive patients with or without SLE. Half of the patients in both groups had history of at least one "non-criteria" aPL-manifestation; only autoimmune hemolytic anaemia was more frequent in aPL-positive patients with SLE.

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AB0553 CHARACTERISTICS OF SYSTEMIC LUPUS ERYTHEMATOSUS AMONG VARIOUS AGE GROUPS: COMPARISON BETWEEN JUVENILE ONSET, ADULT ONSET, AND LATE ONSET SYSTEMIC LUPUS PATIENTS FROM A SINGLE TERTIARY CENTRE IN EGYPT

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Background: Systemic lupus erythematosus (SLE) is a complex autoimmune disease with several factors affecting the characteristics of the disease, including age of onset which is one of these major factors.¹

Objectives: To highlight the differences in disease characteristics among various age groups in an Egyptian cohort from a single tertiary centre.

Methods: Information in this study was derived from medical records of patients admitted to the Rheumatology department in Cairo University from December 2015 to June 2017. All patients fulfilled the SLICC classification criteria of 2012.² Demographic, clinical and serologic characteristics of all patients were recorded. Age of onset was defined as the age at the time of development of manifestations; upon which patients were divided into 3 groups: juvenile onset (JSLE: onset ≤16 years), adult onset (ASLE: onset 17–50), and late onset lupus (LSLE: onset >50) patients.

Results: The study included 369 patients, of which 44 (11.96%) were males and 324 (88.04%) were females. The mean age of onset of the cohort was 24.04 ±10.15 (7–63) years, while the mean disease duration was 65.6±58.4 (0.5–408) months. The study included 75/369 (20.3%) JSLE, 283/369 (76.6%) ASLE, and 10/369 (2.7%) LSLE patients. The median age of onset of JSLE patients was 13 (11–15), 23 (20–30) in ASLE patients, and 54 (52–58) years in the LSLE group. The median disease duration in JSLE patients was 78 (36–125), 36 (24–84) in ASLE patients, and 12 (9–38) months in LSLE patients. Apart from arthritis, malar

rash, and nephritis, there were no differences between the three groups. The prevalence of arthritis was highest among ASLE patients and lowest in JSLE (p=0.004) patients, with LSLE patients showing a comparable prevalence of arthritis to ASLE (p=0.5) and JSLE (p=0.3) patients. On the other hand, JSLE patients showed the highest prevalence of malar rash (p=0.006), as opposed to both ASLE (p=0.04) and LSLE (p=0.004) patients; yet ASLE patients showed a substantially high prevalence of malar rash when compared to LSLE patients (p=0.03). Nephritis was most common in JSLE patients (p=0.007) and least common in LSLE patients. Although there was no statistical difference in the prevalence of nephritis between JSLE and ASLE patients (p=0.1), both groups showed a higher prevalence of nephritis than LSLE patients (p=0.002 and p=0.01 respectively).

Conclusions: Adult onset SLE patients showed the highest prevalence of arthritis. On the other hand, JSLE patients showed the highest prevalence of nephritis as opposed to LSLE patients with the lowest prevalence, indicating a predilection towards a more severe disease in the former group.

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AB0554 FACTORS AFFECTING QUALITY OF LIFE IN INDIAN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: SLE has a profound impact on Quality of Life (QoL). In addition to disease activity and damage, other factors such as fatigue, fibromyalgia and psychiatric comorbidities also influence QoL.¹ However, there is lack of data in the form of comprehensive assessment of all these factors in the same cohort.

Objectives: To assess the quality of life and its correlates among patients with SLE.

Methods: Using a cross-sectional study design, 144 patients with SLE were assessed for disease activity and damage by using SELENA –SLEDAI and SLICC/ACR damage Index (SDI), depression (by using Patient Health Questionnaire-9 (PHQ9)), anxiety (by using Generalised Anxiety Disorder 7 (GAD7)), fatigue (by using Fatigue severity scale (FSS)) and fibromyalgia (as per using ACR 2010 criteria). QoL was assessed using a generic QoL scale – Short Form 36 (SF-36).² Statistical analysis was done using STATA version 14.

Results: The study sample included 140 females and 4 males. Mean age of the participants was 32.48 (SD-7.26) years and the mean duration of illness was 3.92 (SD-3.76) years. The mean SELENA SLEDAI and SDI was 3.42±4.04 and 0.26 ±0.65 respectively. Prevalence of depression (PHQ9 ≥10) and anxiety (GAD7 ≥10) was 25% and 22.9% respectively. Fatigue (FSS ≥4) was present in 51.4%. Physical domains of SF36 were affected more often than the mental domains, 71.5% of the respondents had scores less than 50 in Physical component Summary (PCS) and 61.1% in Mental Component Summary (MCS) of SF36. No correlation was found between disease activity and damage and various domains of SF36. Depression, anxiety and fatigue had a significant negative correlation with all the domains of SF36 (table 1). On multivariate regression only fatigue was an independent predictor of PCS of QoL.

Abstract AB0554 – Table 1. Spearman Correlation between various domains of SF36 and other variables

	SELENA SLEDAI	SDI	Fatigue (FSS)	Depression (PHQ9)	Anxiety (GAD7)
Physical Function	–0.1264	–0.0415	–0.3166**	–0.3307**	–0.2987**
Role Physical	–0.0996	–0.1082	–0.3004**	–0.2304*	–0.2286*
Bodily pain	–0.0913	–0.1086	–0.3902**	–0.34**	–0.3549**
General health	–0.1681*	–0.1356	–0.3145**	–0.2486*	–0.3115**
Vitality	–0.1589	–0.0582	–0.4135**	–0.3595**	–0.3795**
Social function	–0.1645*	–0.096	–0.2619*	–0.3853**	–0.3732**
Role Emotional	0.0471	–0.0783	–0.1905*	–0.2389*	–0.2089*
Mental Health	–0.0025	–0.0123	–0.2811**	–0.4545**	–0.4873**
PCS	–0.2062*	–0.1136	–0.3875**	–0.2868**	–0.285**
MCS	–0.0139	–0.0265	–0.2673*	–0.4174**	–0.4253**

*p<0.05 **p<0.001

Conclusions: Fatigue, depression and anxiety have a greater influence on QoL in SLE than disease activity and damage. Of these, fatigue appears to be the most important variable which influences QoL.

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AB0555

IS HIGHER FITNESS ASSOCIATED WITH BETTER HEALTH-RELATED QUALITY OF LIFE IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS?

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Background: Patients with systemic lupus erythematosus (SLE) present reduced health-related quality of life (HRQoL).¹ As an adjunct to traditional medical therapy, higher levels of physical fitness seem to be associated with better symptomatology and HRQoL.² However, a comprehensive characterisation of the association of different components of physical fitness with the different dimensions of HRQoL in this population is lacking and would provide valuable information for the design of prospective studies.

Objectives: The aim of this study was to investigate the association of different physical fitness components (flexibility, muscle strength and cardiorespiratory fitness (CRF) with the dimensions of HRQoL.

Methods: This cross-sectional study included a total of 70 women with SLE (age 42.5; SD 13.9). The back scratch test, 30 s chair stand test and 6 min walk test (n=49) (from the Senior Fitness Test battery) as well as the handgrip strength test were used to assess physical fitness. The median value of each fitness test [flexibility (0.125 cm), upper muscle strength (24.2 kg), lower muscle strength (15 repetitions) and CRF (575 metres)] was used to consider high ($\geq$ median value) or low ($<$ median value) fitness. HRQoL was assessed through the 36-item Short-Form Health Survey (SF-36). Partial correlation was used to examine the association of physical fitness components with all dimensions of the SF-36. For those dimensions significantly associated with fitness, analyses of covariance compared the differences in HRQoL between patients with low and high fitness level. All analyses were controlled for age, body mass index, depression and fatigue.

Results: Flexibility was correlated with physical function, social functioning and physical component (r_{partial} between -0.26 and 0.28 ; all, $p < 0.05$). Patients with a high level of flexibility only presented better physical function than those with a low level ($p = 0.03$). Upper and lower muscle strength were correlated with physical function, physical role, bodily pain and physical component (r_{partial} between 0.28 and 0.50 ; all, $p < 0.05$) with differences between groups of low and high muscle strength (upper and lower body) in all those dimensions ($p < 0.05$). CRF was correlated with physical function, bodily pain and physical component (r_{partial} between 0.39 and 0.65 ; all $p < 0.01$), with differences in physical function and physical component between groups of low and high CRF ($p < 0.05$).

Conclusions: The main findings of the present study suggest that flexibility, muscular strength and cardiorespiratory fitness are associated with different dimensions of HRQoL, particularly with those related to self-reported physical health, in women with systemic lupus erythematosus. Future prospective research should assess the predictive role of fitness regarding disease activity and function.

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AB0556

THE DIAGNOSTIC AND PREDICTIVE SIGNIFICANCE OF NAILFOLD VIDEO CAPILLAROSCOPY IN CTD PATIENTS WITH PULMONARY ARTERIAL HYPERTENSION

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Background: Pulmonary arterial hypertension (PAH) is a serious complication of connective tissue diseases (CTD), defined as an elevation in mean pulmonary artery pressure 25 mmHg at rest. The 1 year, 3 year survival rates of CTD-PAH are only 69% and 30% respectively. Therefore, to early prediction and diagnosis of PAH is very critical for prolonging survival of CTD patients. Nailfold video capillaroscopy (NVC), is an imaging technique for the study of microcirculation. Until now, capillary abnormalities in systemic sclerosis (SSc) are well documented, but rare study focus on the association between the abnormality of capillary with PAH in CTD patients.

Objectives: Through estimating the correlation of the abnormality of nailfold capillary with pulmonary arterial hypertension (PAH) and other organs injury to find out its importance on early diagnosis and prediction for PAH in the patients with connective tissue disease (CTD).

Methods: Nailfold video capillaroscopy (NVC) was performed using a videocapillaroscope to test the fingers capillaries of 123 hospitalised CTD patients with and without PAH. The parameters of NVC were estimated including: the inter, outer and top loop diameter, loop number, misshaped or giant capillaries, flowing speed, haemorrhage, erythrocyte aggregation, et al. The organ involvement like interstitial lung disease (ILD) and cardiovascular complications were also considered. Mann-Whitney test was used to estimate the difference.

Results: 1) The number of capillary loops in patients with SSc was much lower, but morphologic score, liquid score, and total score were all higher than other CTD patients (Tab). 2) The loop number was significantly decreased but abnormal scores of morphology, liquid, diameter, misshaped loop number, flowing speed, erythrocyte aggregation were increased in CTD-PAH patients especially in SLE-PAH compared with non-PAH patients (Fig). 3) ILD relates the abnormality of peripheral circulation such like capillary malformation, decreased loop number, diameter and blood flow, increased haemorrhage, but the influence of PAP may be larger than ILD. 4) Down-regulated loop number, increased morphology, liquid and total score, and abnormal diameter, malformation, erythrocyte aggregation were found in CTD patients with cardiovascular complications, especially in CTD-PAH patients and SLE patients. 5) Age doesn't directly influence the capillaries of CTD patients, but in young and middle age patients, the difference between PAH and non-PAH groups were more evident.

Abstract AB0556 – Table 1. Comparison of number of nail fold capillaries in patients with various CTD

disease	SSc	SLE	SS	PM/DM	RA
loop number	4.688 ± 1.301	5.915 $\pm 1.512^{***}$	5.875 $\pm 1.495^{**}$	5.717 $\pm 1.49^{**}$	6.417 $\pm 1.429^{**}$
morphologic score	4.117 ± 0.293	2.389 $\pm 0.342^{**}$	2.378 $\pm 0.376^{***}$	2.293 $\pm 0.346^{***}$	2.5 $\pm 1.253^{*}$
liquid score	1.942 ± 0.402	0.5277 $\pm 0.101^{***}$	0.6541 $\pm 0.111^{***}$	0.7367 $\pm 0.125^{**}$	0.5333 $\pm 0.217^{*}$
total score	8.321 ± 0.874	4.628 $\pm 0.612^{***}$	4.297 $\pm 0.569^{***}$	4.54 $\pm 0.572^{***}$	4.633 $\pm 1.972^{***}$

Abstract AB0556 – Figure 1. Loop number and other indexes of nail fold capillaries in patients with various CTD and CTD-PAH with non-PAH CTD