

prevalence of diastolic dysfunction and mitral regurgitation, which are associated with increased risk of cardiovascular death. It is important to consider including an echocardiogram as part of the cardiovascular evaluation in patients with SLE, which may result in early detection of cardiovascular abnormalities.

**PO.3.60 ASSOCIATION OF LEFT VENTRICULAR GEOMETRY ABNORMALITIES AND DISEASE ACTIVITY IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS**

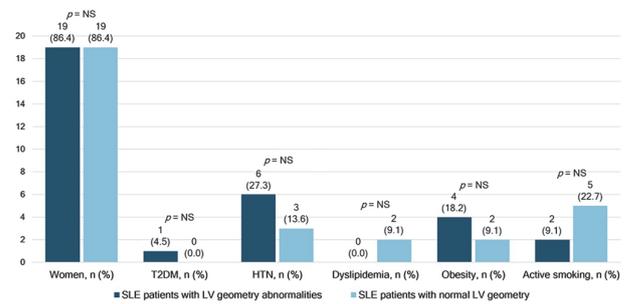
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**Purpose** Patients with systemic lupus erythematosus (SLE) have higher risk of developing a cardiovascular event than the general population, with multiple factors contributing to this increased risk, including systemic inflammation. We aimed to compare the Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) and other disease characteristics of SLE patients with and without left ventricular (LV) geometry abnormalities.

**Methods** This was a cross-sectional study nested of a SLE cohort. We recruited patients with SLE diagnosis according to the 2019 EULAR/ACR classification criteria, aged  $\geq 18$  years. A transthoracic echocardiogram was performed by two certified echocardiographers blinded to clinical information. Disease activity was assessed with SLEDAI. SLE patients with LV geometry abnormalities were included and matched by age and gender to SLE patients with normal LV geometry. Distribution was evaluated with the Kolmogorov-Smirnov test. Comparisons were performed with Chi-square or Fisher's exact test for qualitative variables, and Student's T-test or Mann-Whitney's U-test for quantitative variables. A p-value  $< 0.05$  was considered significant.

**Results** A total of 44 SLE patients were included, 22 with LV geometry abnormalities and 22 with normal LV geometry. Mean age of SLE patients with LV geometry abnormalities was  $35.1 \pm 12.2$  years, compared to  $35.4 \pm 9.4$  years of SLE patients with normal LV geometry,  $p = 0.923$ . There were no significant differences in demographic characteristics between both groups. Demographic characteristics are shown



**Abstract PO.3.60 Figure 1** Comparison of demographic characteristic of SLE patients with and without LV geometry abnormalities

in Figure 1. We found that SLEDAI was significantly higher in SLE patients with LV geometry abnormalities (26.45 vs 17.33,  $p = 0.016$ ). Comparisons of clinical characteristics between groups are shown in Table 1.

**Conclusions** SLE patients with LV geometry abnormalities had higher SLEDAI than patients with normal LV geometry. A transthoracic echocardiogram may be useful detect early cardiovascular abnormalities in SLE patients with high disease activity, and therefore should be considered as part of the cardiovascular evaluation of these patients.

**PO.3.61 RENAL INVOLVEMENT AND CARDIOVASCULAR RISK IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS**

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**Background** Systemic lupus erythematosus (SLE) is an autoimmune disease which generally affects young woman. Kidney affection appears in around 40% of patients and eventually condition the prognosis. Mortality is bimodal: initially is secondary to infections and disease activity and, subsequently, is caused by cardiovascular events (CVE).

In recent years, responsible causes of this increase of cardiovascular risk (CVR) in SLE have been evaluated. In turn, chronic kidney disease is an independent cardiovascular risk factor and is a possible outcome in lupus nephritis.

**Objective** To describe the prevalence of CVE in a cohort of SLE patients and to establish differences according to whether renal involvement is present.

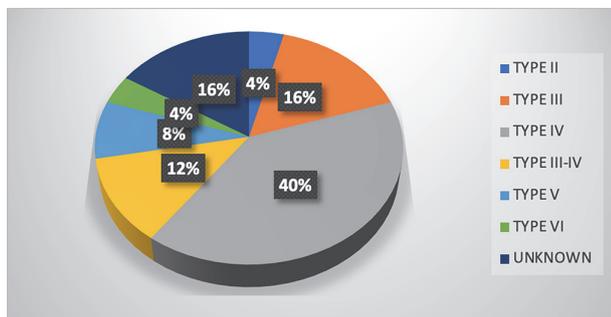
**Methods** Descriptive, cross-sectional, interventional study including SLE patients according to SLICC/ACR 2012 criteria. Two distinct groups were included: SLE with non-renal affection (group 1) and SLE with renal affection (group 2). Classic CV risk factors, established CVD, concomitant diseases, disease activity, current therapy and previous therapeutic history were collected. Established CVD is defined by myocardial infarction (AMI), stroke and/or peripheral arteriopathy (PA).

Carotid ultrasound (US) was performed to each patient to measure intima-media thickness (IMT) at different levels: common carotid, carotid bulb and internal carotid; according to current US values for measuring IMT: normal  $< 0.9$  mm; increased  $> 0.9$  mm and  $IMT > 1.3$  is indicative of atheroma.

**Abstract PO.3.60 Table 1** Comparison of disease characteristic of SLE patients with and without LV geometry abnormalities

Variables	Patients with LV geometry abnormalities (n=22)	Patients with normal LV geometry (n=22)	p-value
Disease duration, months, median (IQR)	60.0 (12.7-150)	72.0 (43.0-117.7)	NS
SLEDAI, median (IQR)	10.5 (4.0-15.0)	6.0 (2.0-9.0)	<b>0.016</b>
CRP, mg/dl, median (IQR)	0.52 (0.33-1.29)	0.60 (0.41-0.85)	NS
ESR, mm/h, median (IQR)	26.0 (13.2-34.2)	29.0 (8.7-58.5)	NS
ANA titers, median (IQR)	640 (160-3200)	480 (160-5120)	NS
Anti-dsDNA, median (IQR)	0 (0-160)	0 (0-200)	NS
C3, mean $\pm$ SD	94.6 $\pm$ 31.4	100.5 $\pm$ 46.1	NS
C4, median (IQR)	13.6 (9.8-14.9)	12.8 (6.4-19.8)	NS
Anti-Ro, median (IQR)	4.5 (2.0-190.5)	3.5 (2.0-82.2)	NS
Anti-La, median (IQR)	2.0 (2.0-4.0)	2.0 (2.0-3.0)	NS
Hydroxychloroquine, n (%)	20 (90.9)	18 (81.8)	NS
Glucocorticoids, n (%)	19 (86.4)	17 (77.3)	NS

SLE, systemic lupus erythematosus; LV, left ventricular; NS, not significant; SLEDAI, Systemic Lupus Erythematosus Disease Activity Index; CRP, C-reactive protein; ESR, erythrocyte sedimentation rate; ANA, antinuclear antibodies; anti-dsDNA, anti-double stranded DNA



Abstract PO.3.61 Figure 1

**Results** 133 patients (91.04% women) with a median age of 51.19 (14.52) years and 17.21 (11.02) years since diagnosis were included. 32 of them (24.06%) had renal involvement as glomerulonephritis (GN) evidenced by biopsy (18.66%), urine sediment and/or 24-hour urine sample alterations (2.99%) or end-stage renal failure (2.24%). Prevalence of different types of GN is shown in the figure.

Figure1 Prevalence of different types of GN.

In group 1, patients with high blood pressure, dyslipidemia and diabetes were 30.69%; 39.60% and 6.93%, respectively. Numerically, in group 2 proportion of distinct RCVF was higher: high blood pressure 68.75%, dyslipidemia 46.88% and diabetes 15.63%.

Over the course of the disease, 24.75% of patients in group 1 presented some CVE: AMI (3.96%), stroke (4.95%) and PA (15.84%) whereas this proportions in group 2 were: AMI (6.25%), stroke (6.25%) and PA (9.38%). Out of the total sample, 16.42% patients had an altered carotid doppler US, 4 of them with kidney involvement. In group 1, 14.85% had an increased IMT and 15.84% presented PA, 4.95% developed stroke and 3.96% AMI. In group 2, only 4 patients had anomalies in doppler ultrasound, 3 of them presented PA, 2 developed stroke and 2 AMI. Finally, 21.05% did not undergo carotid US for different reasons.

**Conclusions** In our study, no significant statistical differences were found between both groups 1 and 2 referring to development of CVE: AMI (p 0.58), stroke (p 0.77) and PA (p 0.36).

Regarding to the result of doppler US, we observed no differences in terms of increased IMT and development of CVE in both groups: AMI (p 0.38), stroke (p 0.38) and PA (p 0.66).

**PO.3.62 CARDIOPULMONARY DISEASE IN SLE- INCREASING TREND!**

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**Introduction** Systemic lupus erythematosus (SLE) is an autoimmune disease that can affect every organ system.<sup>1</sup> Cardiopulmonary complications of SLE contribute to significant morbidity and mortality among the affected population and range from subclinical to fulminant organ failure.

We studied patients with SLE and focussed on the distribution of Cardiopulmonary manifestations and their SLICC scores.

**Purpose** To analyse the cardiopulmonary manifestations in our cohort and compare with other Indian studies.

**Methodology** All consecutive patients with SLE, diagnosed by Rheumatologist in the medical college hospital over 3 months (both new and reviews) were studied for clinical presentations. After getting patients' consent, data was collected regarding demographic details, clinical manifestations, investigations, including CT chest, Echo and PFT, and the clinical course. Ethics committee approval was obtained.

**Results** Total 50 patients, Mean Age : 29.28, Sex Ratio : 9:1 (F:M)

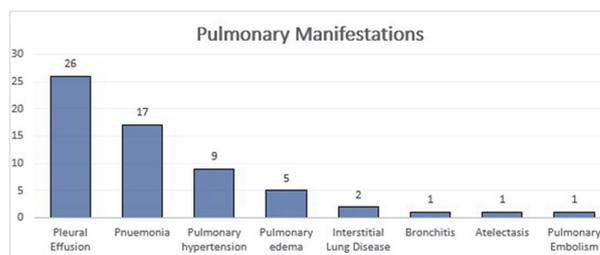
Fever was present in 29/50 patients, cough in 19/50 and Shortness of Breath in 27/50. Anemia was seen in 35/50, thrombocytopenia in 24/50 and leukopenia in 13/50 .

Immunology showed 22 had dsDNA while 6 had Sm antibody. ANA was positive in all. Renal lupus was seen in 23. Mean SLICC Score was 20.1. Pleural Effusion and Pneumonia were the most common pulmonary manifestations, while pericardial effusion and LV dysfunction were the common cardiac manifestations.

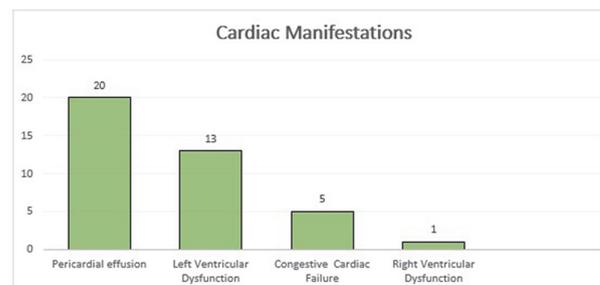
**Discussion** 1. Cardiopulmonary manifestations in this cohort are similar to other studies done in India.

Abstract PO.3.62 Table 1 The table showing the number of patients within different ranges of SLICC Scores

RANGE OF SLICC SCORES	NO OF PATIENTS
10-15	13
15-20	12
20-25	11
25-30	8
30-35	4
35-40	2



Abstract PO.3.62 Figure 1



Abstract PO.3.62 Figure 2