Results: The patients were 61 females and 19 males (sex-ratio=3) with a mean age of 38 years.

Forty two patients had cardiac involvement. They were 33 female and 9 male with a mean age of the disease of 31,8 years (16-80 years) at the beginning of the disease and 41 years at the time of the study.

83% of patients were symptomatic. The symptoms were dominated by objectified chest pain (43%). In Doppler echocardiography, pericarditis was found in 23 patients (55%) with a single case of cardiac tamponade. Libman Saks endocarditis and lupus myocarditis were found in one case each. Pulmonary hypertension (HTP) was observed in 16 patients (38%) and valvular disease in 22 patients (52%). Cardiomegaly was observed in 9 patients (21%). Electrical abnormalities were dominated by microvoltage found in 8 patients. The general symptoms (83%), skin lesions (76%) and musculoskeletal involvement (64%) were the most frequent events associated with the cardiac manifestations in group 1. ANA were positive in 97% of cases and antiphospholipid antibodies in 24%. Prednisone: 1mg/kg/day and immunosuppressive therapy were indicated respectively in 71% and 38% of patients.

Conclusion: Cardiac abnormalities are very common in lupus patients even when clinically asymptomatic. SLE is among systemic diseases most providers of heart disease. Echocardiography is an excellent non-invasive tool for cardiac evaluation. Their research must be systematic with echocardiography in order to reduce subsequent cardiac morbidity and mortality among the lupus patients.

Disclosure of Interests: None declared

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AB0558 TIME OF DIAGNOSTICS OF SJOGREN'S SYNDROME DEPENDING ON ITS FIRST MANIFESTATION

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Background: Sjogren's syndrome (SS) is a rare autoimmune disease with multisystem manifestations. Diagnostics of SS is intricate due to its low prevalence and need of invasive tests for diagnosis confirmation.

Objectives: To investigate influence of the first symptom of SS on the time of diagnosis establishment.

Methods: The study was conducted at Dnipropetrovsk Mechnikov Regional Hospital, Dnipro, Ukraine. 23 patients (1 male and 22 females, mean age 54 [47;61] years) with SS that received medical care at Rheumatology Department from 2007th to 2017th were enrolled to the study. Diagnosis of SS was provided according to American-European Consensus Group criteria (2002). We analyzed time from the first symptom appearance to diagnosis of SS establishment. Symptoms of the disease onset were classified into 4 groups: fever (body temperature >37 °C), arthritis (swelling and/or tenderness of ≥1 joints), signs of salivary glands injury (swelling of salivary glands, dry mouth syndrome) and other signs of autoimmune diseases (Rhaynaud's phenomenon, rash, myalgia).

Results: Median time between the first symptoms and SS diagnostics was 8 [2;17] years. Time to SS diagnostics depending on the first manifestation is in the table below.

Table 1. Time of SS diagnostics depending on the first symptom.

Symptom	Present	Absent	Log-rank test (p)
Fever	3 [1;8]	9,5 [2,2;17]	0,06
Arthritis	17 [6;22,5]	6,5 [2;11,5]	0,06
Salivary glands injury	11 [6;19,5]	4,5 [2;10]	0,15
Symptoms of autoimmune diseases	4 [2;8]	10,5 [2;18]	0,09

Presence of fever or symptoms of autoimmune diseases led to faster diagnostics of SS. Presence of salivary glands injury didn't influence time of SS diagnostics, while arthritis enlarged it (Figure 1).

Conclusion: Fever and signs of autoimmune diseases may be useful in diagnostics of SS. Greater alertness of symptoms of salivary glands injury is needed.

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AB0559 ASSOCIATED FACTORS AND PREVALENCE OF OSTEONECROSIS IN A COHORT STUDY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) FROM HOSPITAL DEL MAR/PARC DE SALUT MAR.

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Background: Although the pathophysiology of osteonecrosis (ON) is not completely well-understood, it is likely the result of multiple combined effects such as environment, metabolic or genetic factors.

Clinical presentation of ON may be silent or may appear in a variable range of gradual-onset pain. The prevalence of ON in patients with SLE varies according to whether the lesions are symptomatic or asymptomatic.

Corticosteroid therapy (CT) has been recognized as a main risk factor to develop ON. Nevertheless, it looks like ON is more frequent in patients with SLE than in any other disease requiring systemic CT, which suggests that the use of corticosteroids may not be the only risk factor in those patients.

Objectives: To evaluate the prevalence of ON and to determine the association between ON and other variables such as sociodemographic factors, cardiovascular risk factors, SLE symptoms, autoimmunity, treatment received and disease activity in patients with SLE from Hospital del Mar.

Methods: 177 medical records were reviewed. Inclusion criteria included patients with SLE that met at least 4 of 11 ACR-LUPUS criteria revised in 1982 and updated in 1997. We identified six ON cases. The ON variable was evaluated by nuclear magnetic resonance in symptomatic patients. Afterwards, we matched ON patients with controls according to age and gender in a 1:2 proportion.

A bivariate descriptive analysis between cases and controls was made including demographic and clinical variables, cardiovascular risk factors and treatment received. The association between ON and the previously mentioned variables was evaluated by Fisher's Exact test and Chi-square test.

Results: The prevalence of ON was 3.4% (CI 95%: 0.01% - 0.07%), lower than that described in other series. We found statistical significance association between ON and arterial hypertension (patients with ON and hypertension: 62.5% vs patients with ON without hypertension: 10%; p-value 0.043), as well as between ON and CT evaluated by its presence in the last hospital follow-up (patients with ON under CT: 100% vs patients with ON without CT: 20%; p-value 0.025). The association between ON and the use of corticosteroid pulse therapy (CPT) was also statistical significance (patients with ON who received CPT: 80% vs patients with ON who did not receive CPT: 15.3%; p-value 0.022). Finally, we found a marginal association, although relevant, between ON and the SLICC damage index (p-value 0.057) (Table/Fig-1).

Conclusion: We found a statistical significance association between ON and hypertension (classical known cardiovascular risk factor) as well as between ON and CT (in the last visit) and the use of CPT (risk factor known as an etiological agent in ON). We did not find a statistical significance association between ON and lupus disease activity (SLEDAI), but a trend to statistical significance was noticeable with respect to the accumulated irreversible damage on lupus disease (SLICC). In order to confirm the results obtained, it is necessary to carry out other studies, with a larger sample and a longer follow-up period.

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TABLE/FIG-1. Demographic and clinical variables of our cohort and their association with ON.

Variables	CASES (6)	CONTROLS (12)	p-value
Gender:			
Female	5 (33.3%)	10 (66.6%)	1.00
Male	1 (33.3%)	2 (66.6%)	
Age*	32.50 ± 18.38	33.33 ± 11.83	0.511
Ethnic group:			
Caucasian	5 (35.7%)	9 (64.2%)	1.000
Hispanic American	1 (33.3%)	2 (66.6%)	
Afro-American	0 (0%)	0 (0%)	
Asian	0 (0%)	1 (100%)	
Body Mass Index (BMI) *	25.72 ± 2.38	22.89 ± 3.79	0.134
Smoking:			
Yes	0 (0%)	3 (100%)	0.312
Former smoker	2 (66.6%)	1 (33.3%)	
Dyslipidemia	2 (40%)	3 (60%)	1.000
Hypertension	5 (62.5%)	3 (37.5%)	0.043
Diabetes Mellitus	2 (100%)	0 (0%)	0.098
Photosensitivity	4 (33.3%)	8 (66.6%)	1.000
Oral ulcers	3 (60%)	2 (40%)	0.268
Arthritis	6 (37.5%)	10 (62.5%)	0.529
Pleuritis	0 (0%)	1 (100%)	1.000
Pericarditis	0 (0%)	2 (100%)	0.529
Leukopenia	3 (30%)	7 (70%)	1.000
Nephritis	2 (40%)	3 (60%)	1.000
Antinuclear antibody	5 (29.41%)	12 (70.59%)	0.333
Anti-dsDNA	3 (25%)	9 (75%)	0.344
Anti-Sm	0 (100%)	4 (100%)	0.245
Anti-SSA (Ro)	2 (28.57%)	5 (71.43%)	1.000
Anti-RNP	0 (0%)	4 (100%)	0.245
Hypocomplementemia	3 (25%)	9 (75%)	0.344
SLICC:			
0	2 (16.67%)	10 (83.3%)	0.057
1	3 (60%)	2 (40%)	
2	0 (0%)	0 (0%)	
3	1 (100%)	0 (0%)	
SLEDAI *	2.33 ± 2.34	2.50 ± 2.28	0.883
APS associated	1 (50%)	1 (50%)	1.000
Corticosteroids (past YES/NO)	6 (35.2%)	11 (64.7%)	1.000
Corticosteroids (last visit YES/NO)	3 (100%)	0 (0%)	0.025
Corticosteroids pulses (YES/NO)	4 (80%)	1 (20%)	0.022

*: mean ± standard deviation.

AB0560 A 10-YEAR REVIEW OF DAMAGE ACCRUAL AND PROGRESSION IN A MULTI-ETHNIC COHORT OF SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) IN MALAYSIA

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Background: Systemic Lupus Erythematosus (SLE) is a chronic autoimmune disease with an unpredictable course of disease. The severity and outcomes of SLE vary across different ethnicities.

Objectives: This study is aimed to determine the pattern of development and progression of organ damage in a cohort of multi-ethnic SLE patients followed for at least 10 years, and to identify the factors associated with the damage accrual.

Methods: We reviewed the medical records of an inception cohort of patients who attended regular monitoring since 2007 at the Rheumatology and Nephrology/SLE Clinic, National University of Malaysia Medical Centre (UKMMC). Their medical records were retrospectively reviewed to obtain information on SLE disease characteristics, frequency of disease flares, cumulative corticosteroid dose and the use of other immunosuppressive treatment from 2007 until their last visit in 2017. The Systemic Lupus International Collaborating Clinics/American College of Rheumatology damage index (SDI) was used to determine the organ damage at baseline and after 10 years of being followed up. For patients who have succumbed or lost to follow up during the 10-year observation period, the SDI scores just before death or time of follow up loss were recorded.

Results: A total of 258 patients were included with majority of them were Malays (n=145, 56.2%), followed by Chinese (n=100, 38.8%) and Indians

(n=13, 5.0%). The mean SDI score increased from 0.39±0.79 at baseline to 1.13±1.47 after 10 years, p<0.001. At 10 years, Indian patients were found to have a significant increase in their SDI scores from baseline compared to Malay and Chinese (p<0.05). New damage accrual was recorded in 38.8% patients with the most common new organ damage significantly occurred in renal (p<0.001), ocular (p=0.05) and cardiovascular (p=0.07). Higher age at baseline, higher ACR criteria at diagnosis, persistent active disease ≥ 6 months, and prednisolone use of ≥ 1mg/kg were independently associated with higher risk of damage accrual. In contrast, hydroxy-chloroquine treatment was associated with lower risk of damage accrual.

Conclusion: The SDI scores of our SLE cohort increased significantly over 10 years which predominantly affecting the renal. Indian patients accumulated higher SDI scores while persistent active disease, higher ACR criteria at diagnosis, and the use of high dose steroid were associated with new organ damage.

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AB0561

RISK FACTORS FOR ADVERSE PREGNANCY OUTCOMES AND LOW RISK FACTORS FOR ADVERSE PREGNANCY OUTCOMES AND LOW APGAR SCORES OF NEWBORNS IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic lupus erythematosus (SLE) is an autoimmune disease that occurs in women of childbearing age, and has high risk for adverse pregnancy outcomes (APOs) (1,2). Moreover, it is unclear whether maternal SLE influences the growth and development of children born from SLE mothers. Apgar scores at five minutes is a predictive factor of neurological development of newborns. However, there is no report about the association between maternal SLE and Apgar score of newborns.

Objectives: The aim of this study was to identify risk factors for APOs and for low Apgar scores of newborns from SLE mothers.

Methods: We investigated 50 SLE patients who were delivered from May 2006 to December 2018 in our institution. We examined retrospectively regarding APOs including spontaneous abortions, preterm births, premature rupture of membranes (PROM), light-for-date (LFD) newborns, and low Apgar scores of newborns. We analyzed the association between disease activity, laboratory findings, treatment agents, and APOs or Apgar scores.

Results: As for APOs of SLE mothers, cases with preterm births showed higher SLE disease activity index (SLEDAI) during the first trimester (P = 0.01) and higher titers of anti-double-stranded DNA (anti-dsDNA) antibodies at the time of conception (P < 0.01) compared to full-term births. In these cases, mean glucocorticoid doses during pregnancy (P = 0.02) and the rate of treatment intensification (P < 0.01) was higher than full-term birth. In the mothers who delivered LFD newborns, serum complement levels at conception were lower than in those with non-LFD newborns (C3: P = 0.02; CH50: P = 0.05). Cases with spontaneous abortions and PROMs did not differ significantly from the cases without spontaneous abortions and PROMs. Apgar scores at one minute were correlated with SLEDAI during the third trimester (P < 0.01) and with the titer of anti-dsDNA antibodies at conception (P < 0.01). Additionally, Apgar scores at five minutes were correlated with the titer of anti-dsDNA