Methods: We included patients who were repeatedly tested for anti-Sm antibodies at SLE diagnosis and within 12 months after SLE diagnosis. The clinical and laboratory profiles, and SLE disease activity index (SLEDAI) were collected at the time of the anti-Sm antibody test. SLEDAI and laboratory variables associated with disease activity were compared at baseline between patients with and without anti-Sm antibodies. The longitudinal association between disease activity and anti-Sm antibodies was also evaluated in total patients and in those with anti-Sm antibodies.

Results: Of 92 patients who were tested for anti-Sm antibodies at the time of SLE diagnosis, 67 and another 67 patients were followed up for the presence of anti-Sm antibodies at 6 and 12 months, respectively. Although the baseline SLEDAI was comparable in SLE patients with and without anti-Sm antibodies, the serum anti-Sm antibody level at diagnosis was significantly correlated with SLEDAI ($P = 0.003$). Patients with anti-Sm antibodies at 12 months had higher SLEDAI and anti-dsDNA levels than those without anti-Sm antibodies ($P = 0.002$, respectively). The changes in anti-Sm antibody levels over 12 months were also correlated with the alterations in SLEDAI ($P = 0.029$).

Conclusion: This study suggests that anti-Sm antibody level is associated with disease activity in patients with new-onset SLE, and that monitoring of anti-Sm antibody levels could help assess the disease activity.

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AB0526

PRIMARY SJOGREN'S SYNDROME AND ORGAN SYSTEM INVOLVEMENT: A RETROSPECTIVE STUDY OF 153 PATIENTS FROM WESTERN INDIA

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Background: Primary Sjogren's syndrome (pSS) is under diagnosed and improperly treated disease because of its variable modes of presentation. Limited data is available on pSS from India.

Objectives: To describe organ system involvement in patients with pSS and compare to other studies.

Methods: Retrospective proforma based analysis of patients with pSS (AECG 2002 criteria) from 2002-2012 at a tertiary rheumatology centre was done. Demographic data and systemic organ involvement of patients was noted.

Results: We had 153 consecutive patients of pSS (135 females, 18 males) in the 10 years which were included. Mean age at diagnosis was 47 ± 11.62 years. Mean duration of sicca symptoms was $32 (\pm 31)$ months prior to presentation. Organ system involvement was seen in 93 (60.7%) patients as follows:- Musculoskeletal involvement in 90 (58.8%) patients, Skin involvement in 48 (31%) patients, Lung involvement in 27 (17.6%) patients, Renal involvement in 22 (14.3%) patients, Neurological involvement in 21 (13.7%) patients, GI involvement in 6 (3.9%) patients and Lymphoma in 2 (1.3%) patients. Comparison of organ system involvement with other major studies of pSS is shown in table 1.

Table 1. Comparison with major studies of pSS from different populations:

Parameter	Spanish ¹ (1994-2007)	Italian ²	Chinese ² (1985- 2006)	Vellore ² (2004- 2011)	Our study (2002- 2012)
Criteria used	European community	European community	AECG	AECG ACR	AECG
No. of patients	1010	1115	573	332	153
Females (%)	937 (93%)	1067 (95.7)	524 (91.5)	315 (94.9)	135 (88.2)
Mean age (yrs)	53.8 $\pm$ 0.5	57.5 $\pm$ 13.7	39	44.5 $\pm$ 10.6	47 $\pm$ 11.6
Disease duration (months)	74.9 $\pm$ 4	72	-	62.6 $\pm$ 65.67	35 $\pm$ 41
Xerostomia (%)	975 (96)	1033 (92.6)	484 (84.5)	313 (94.3)	146 (95.4)
Xerophthalmia (%)	968 (96)	1054 (94.5)	401 (70)	295 (88.9)	148 (96.7)

Ocular test positive (%)	898 (94)	982 (88.1)	-	-	149 (97.4)
Sialadenitis (%)	269 (27)	346 (31)	-	28 (8.4)	42 (27.5)
Arthralgia/arthritis (%)	640 (63)	806 (72.3)	274 (47.8)	275 (82.8)	90 (58.8)
Skin involvement (%)	91 (9)	106 (9.5)	-	35 (10.5)	48 (31)
Raynaud's phen (%)	187 (18)	239 (21.4)	101 (17.6)	1 (0.3)	2 (1.3)
Lung involvement (%)	112 (11)	60 (5.4)	221/522 (42.3)	40 (12.1)	27 (17.6)
Renal involvement (%)	48 (5)	-	192 (33.5)	49 (14.8)	22 (14.4)
Neurological inv (%)	131 (13)	59 (5.3)	68 (11.9)	32 (9.6)	21 (13.7)
GI involvement (%)	5 (0.5)	-	188 (32.8)	29 (8.7)	6 (3.9)
Lymphoma (%)	-	50 (4.5)	-	-	2 (1.3)
ANA (%)	859 (85)	941 (84.4)	474/565 (83.9)	206/312 (66)	151/151 (100)
Anti-Ro (SS-A) (%)	518 (52)	762 (68.3)	474/568 (83.5)	148/232 (63.8)	137/141 (97.2)
Anti-La (SS-B) (%)	343 (34)	410 (36.8)	231/568 (40.7)	88/231 (38.1)	108/119 (90.8)
RF (%)	467 (48)	582 (52.2)	292/476 (61.3)	180/301 (59.8)	95/106 (89.6)
Hyperglobulinemia (%)	-	530 (47.5)	-	50/261 (15.4)	56/135 (41.5)

Conclusion: Indian pSS patients are younger than their European counterparts. Majority of these patients show organ system involvement. Raynaud's phenomenon is rare in Indian patients. Lung, renal and gastrointestinal involvement in Indian patients is more prevalent than in European patients, but less prevalent than in Chinese patients. Musculoskeletal and neurological involvement is similar across different populations.

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AB0527

PREDICTIVE VALUE OF MIR200B-5P IN THE LYMPHOMAGENESIS IN SJÖGREN'S SYNDROME (SS): COMPARISON WITH THE PUBLISHED PREDICTION MODELS. PRELIMINARY RESULTS

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Background: miR200b-5p expression levels are decreased in the minor salivary glands of SS patients who have or will develop non-Hodgkin's lymphoma (NHL), discriminate them from those who will not ($p < 0.0001$) and independently predicted NHL development ($p < 0.0001$)¹.

Objectives: To compare the predictive performance of low miR200b-5p levels with the previously published multifactorial predictive models.

Methods: 27 SS patients who didn't develop NHL during follow up (median follow up time upon biopsy performance, range: 8.9yrs, 1.33-14yrs) and 17 diagnosed with NHL during follow up (pre-lymphoma, median follow-up till lymphoma diagnosis, range: 3.67yrs, 0.42-8.5yrs) were studied. The multifactorial predictive models examined were: 1. Ioannidis et al² who defined patients expressing at least one of low C4 levels, salivary gland enlargement (SGE) and purpura as high-risk, 2. Baimpa et al³ who designed 3 models (1, 2 and 3) based on the expression of at least 1, 2 or ≥ 3 , respectively, of neutropenia, cryoglobulinemia, splenomegaly, lymphadenopathy and low C4 levels, 3. Quartuccio et al⁴ who identified as high risk patients those having SGE and at least two of the following: low C4 levels, cryoglobulinemia, anti-La antibodies and leukopenia, and 4. Fragkioudaki et al⁵ that defined as high-risk group those carrying ≥ 3 of the independent risk factors including SGE, lymphadenopathy, Raynaud phenomenon, anti-Ro/SSA and/or anti-La/SSB antibodies, rheumatoid factor positivity, monoclonal gammopathy and low C4 levels. Analyses were performed by estimating the area under the ROC curve (AUC), Kaplan-Meier (KM) lymphoma-free survival curves

compared by the log-rank test, the positive and negative predictive values, sensitivity (Se) and specificity (Sp), as well as the PSEP index of the model intrinsic prognostic value⁶.

Results: ROC analysis identified low miR200b-5p levels as the better prognostic tool from the other multifactorial models. Its predictive value was further supported by the other analyses (including PSEP index), where it ranked among the two best models, whereas it had the better combination of sensitivity and specificity (Table).

Table. Comparison of models predicting NHL development in SS

	ROC		KM		PPV	NPV	PSEP	Se	Sp
	AUC	p value	p value	p value					
Ioannidis et al	0.748	0.006	0.006	0.006	0.57	0.94	0.51	0.94	0.56
Baimpa et al, model 1	0.775	0.002	0.002	0.003	0.63	0.90	0.53	0.88	0.67
Baimpa et al, model 2	0.687	0.038	0.038	0.006	0.88	0.72	0.60	0.41	0.96
Baimpa et al, model 3	0.647	0.104	0.104	0.008	1.00	0.69	0.69	0.29	1.00
Quartuccio et al	0.794	0.001	0.001	≤0.0001	1.00	0.79	0.79	0.59	1.00
Fragkioudaki et al	0.830	≤0.0001	≤0.0001	≤0.0001	0.71	0.91	0.63	0.88	0.78
Low miR200b-5p levels	0.863	≤0.0001	≤0.0001	≤0.0001	0.87	0.86	0.73	0.76	0.93

Conclusion: Low miR200b-5p levels associated with the incidence of NHL in SS, exhibiting consistently higher values than the other multifactorial models; however, larger cohorts are required to verify its statistical and clinical significance.

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AB0528

ANALYSIS OF THE CASES OF 33 SLE PATIENTS THAT NECESSITATED CARDIOVASCULAR SURGERY

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Background: In SLE, immune complexes are overproduced and deposited in tissues where they ultimately cause damage. The immunocomplexes, which are deposited in the myocardium, blood vessels and atrioventricular valves, have been suggested to cause damage to the relevant tissues, but it remains unclear in which cases tissue damage progresses to a point that surgical treatment is required.

Objectives: The purpose of our study was to classify heart diseases into valvular heart diseases (V), ischemic heart diseases (I) and aortic aneurysms (A), to compare each class in terms of the correlation between the activity of SLE and the progression and exacerbation of heart disease, and in the future, to use the features of the correlations to carry out the prevention and treatment of heart diseases complicating SLE.

Methods: Between the years 2012 and 2018, a total of 2852 patients diagnosed with SLE were admitted to our hospital, and 33 had heart surgery; however, 2 patients with infective endocarditis and one patient, who had not been diagnosed with SLE before surgery, were excluded from the study, therefore 30 cases were examined. Comparative studies were also carried out to examine the association between the levels of various autoantibodies and IgG and the onset of heart disease, the association between the total administered doses of steroids, the concomitant use of immunosuppressants as well as the association between DNA antibodies and complement.

Results: At the time of the surgical treatment of the heart diseases, the mean duration of illness was 25.4 years, and the age was V vs. I vs. A=56.7 (44-79, median value: 56.2) vs. 55.1 (34-72, median value: 57.0) vs. 63.2 (41-78, median value: 65.5), showing that the age tended to be higher in the A group. The integrated value of the duration of illness and the level of anti-DNA antibodies, which served an index of activity, was calculated, and the findings revealed that V vs. I vs. A was (14020 vs. 32966 vs. 29444), showing that the values tended to be slightly lower in valvular heart diseases. As for antiphospholipid antibodies, the rate of positivity of either CLβ2GPI or anti-CL antibodies or LA was as follows: V vs. I vs. A (58% vs. 28% vs. 33%), showing that the rate tended to be higher in valvular heart diseases and that anti-CL antibody-positive patients were particularly higher in number among those with valvular heart diseases (V). The maximum preoperative levels of IgG were as follows: V vs. I vs. A (2803 vs. 1889 vs. 1708), which showed that the levels were higher with valvular heart diseases (V); those of SS-A antibodies were as follows: (36% vs. 43% vs. 42%), which showed high positive rates in all cases; and RNP antibody-positivity rates were as follows: (9% vs. 29% vs. 25%), and were relatively lower in valvular heart diseases (V). Regarding the medical treatment, the total administered doses of steroids were (25g vs. 39g vs. 63g) and tended to be lower in valvular heart diseases (V); use of immunosuppressants was found in 5 of 30 patients (16%); and concomitant use of both was particularly low in valvular heart diseases (V) as it accounted for only one case.

Conclusion: Our study findings suggested that in SLE patients, prolonged duration of illness, positivity of SS-A antibodies and the absence of intake of immunosuppressants were highly likely to lead to cardiovascular diseases that need surgical treatment. Low integrated DNA antibody levels and the absence of concomitant use of immunosuppressants, despite high levels of IgG and the positivity of SS-A antibodies and anti-CL antibodies, might be risk factors for valvular heart diseases necessitating surgical treatment.

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AB0529

SICCA SYNDROME DURING CHRONIC HEPATITIS C: PREVALENCE AND CHARACTERISTICS

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Background: The prevalence of Sicca Syndrome (SS) in patients with Chronic Hepatitis C (CHC) ranges from 5% to 33%. A link between hepatitis C virus (HCV) and SS was evoked given the strong association of these two pathologies with mixed cryoglobulinemia (MC) on one hand and with the salivary tropism of HCV on the other hand.

Objectives: To study the prevalence and the characteristics of Sicca Syndrome during CHC.

Methods: All patients suffering from CHC followed over a period of 11 years (2002 – 2012) were retrospectively included. Only patients having clinical SS (xerostomia and/or xerophthalmia) were selected. We have analyzed all data concerning the patient, the hepatitis and the SS.

Results: Two hundred and four patients affected by CHC were included. A clinical SS was found in 17 patients (8.39%). There were 15 women and 2 men with an average age of 45.6 years. A High viral load and an advanced hepatic fibrosis were respectively found in 94 and 88% of cases. Cryoglobulinemia and antinuclear antibodies were found in 37.5% and 53% of patients, respectively. Four patients (3 women and 1 man) had also presented the criteria of Sjogren Syndrome. Their average age was 47 years. MC was positive in all 4 patients whereas anti-SSA and