AB0333

USEFULNESS OF MULTI-PARAMETRIC EVALUATION INCLUDING MINOR SALIVARY GLAND BIOPSY FOR THE DIFFERENTIAL DIAGNOSIS OF SICCA SYNDROME IN A SPANISH SINGLE-CENTER EXPERIENCE

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Background: Sjögren's syndrome (SS) is a systemic autoimmune disease characterized by mononuclear cell infiltration of the exocrine glands, which leads to sicca syndrome and systemic manifestations. The minor salivary gland biopsy (MSGB) is undoubtedly important for the classification, diagnosis and prognosis of SS. However, differentiating SS and non-Sjögren's sicca syndrome (NSS) can be challenging.

Objectives: The aim was to evaluate the histological characteristics of MSGB besides focus score (FS) in patients with sicca syndrome and the usefulness of the different clinical, serological and histological parameters to diagnose, classify and describe the prognosis of patients with Sjögren's syndrome.

Methods: Prospective observational single-center study of patients referred for study of sicca syndrome with multi-parametric evaluation from January 2019 to December 2020. A diagnostic protocol based on Schirmer's test, unstimulated whole salivary flow (UWSF) and minimally invasive MSGB was applied. Patients fulfilling 2016 ACR-EULAR classification criteria were classified as SS.

Results: In a cohort of 115 patients with sicca syndrome, 55 (47.8%) were diagnosed with SS. The mean age was 56.9±14.5 years and most of the patients were women (81.7%) with no significant differences between SS and NSS. SS were more likely to present positive Schirmer's test, positive UWSF, anti-Ro+, FS≥1, antinuclear antibodies (ANA+), rheumatoid factor (RF+) and anti-La+ among others.

MSGB was a safe procedure and very effective (only 7% insufficient biopsies) in our cohort. The mean gland size of the MSGB was 5.7±0.37mm². Furthermore, it was the individual parameter that most correlated with SS, even more than anti-Ro+, Schirmer's and UWSF. Seronegative SS (Anti-Ro-) was 47.3%. These patients could not have been diagnosed except by MSGB. Scintigraphy did not help to differentiate SS from NSS, neither patient-referred xerostomia nor xerophthalmia. The most frequent histological diagnosis was focal lymphocytic sialadenitis (FLS) (81.8%) followed by nonspecific chronic sialadenitis (9.1%). However, only FLS had a correlation with SS. There were no MSGBs labeled normal among the SS patients. Mean FS was 2.22±0.2 (16.7% had FS≥3).

The rest of the histological parameters that showed a positive correlation with SS were glandular atrophy (GA), germinal centers (GC), lymphoepithelial lesions (LEL) and lymphoid follicles (LF). FS≥1 is the current histological classification criteria for ACR/EULAR. However, the presence of lymphocytic infiltrates (LI) (although not FS≥1) and FLS were suggestive markers of SS with greater sensitivity (SE) and specificity (SP). FS≥3, GC, LEL and LF were only found in SS and were associated in previous studies with higher risk of lymphoma and systemic disease.

		Prevalence		Test		
		SS	NSS	p value	Sensitivity	Specificity
Classification criteria	Schirmer's test	78.6%	57.6%	p=0.019	0.78	0.42
	UWSF	65.5%	38.3%	p=0.004	0.65	0.62
	Anti-Ro+	52.7%	6.7%	p<0.001	0.53	0.93
	FS≥1	66.7%	25%	p=0.027	0.67	0.75
	Anti-La+	18.5%	1.8%	p=0.003	0.43	0.87
Non classification criteria	ANA+	74.5%	28.3%	p<0.001	0.75	0.72
	RF+	38.2%	10.0%	p=0.001	0.43	0.87
	Scintigraphy	49.1%	38.3%	p=0.245	0.49	0.62
	Xerostomia	76.1%	77.9%	p=0.663	0.76	0.2
	Xerophthalmia	74.5%	83.8%	p=0.302	0.74	0.16
Histological characteristics	LI	92.2%	27.5%	p<0.001	0.9	0.78
	FLS	81.8%	6.7%	p<0.001	0.82	0.93
	GA	75.5%	50.9%	p=0.010	0.76	0.49
	GC	2.0%	-	p=0.310	0.02	1.00
	LEL	12.2%	-	p=0.011	0.11	1.00
	LF	4.1%	-	p=0.153	0.04	1.00

Conclusion: SS is a heterogeneous disease that requires a comprehensive clinical, serological, functional and histological evaluation. MSGB is a simple, safe, repeatable procedure that provides enormous information. It was the single parameter that best correlated with SS and allowed the diagnosis of seronegative

SS. In summary, the use of MSGB is essential not only for the differential diagnosis of sicca syndrome but also as a prognostic marker for SS.

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AB0334

THE FIRST 1000 DAYS OF LIFE AND REPRODUCTIVE DISORDERS IN WOMAN WITH RHEUMATIC DISEASE (RDS)

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Background: Gynaecological problems are often ignored by rheumatologist and have a negative impact on quality of life of RDs patients.

Objectives: The aim of this study was to describe gynaecological, reproductive and sexual problems in premenopausal woman with RDs.

Methods: A monocentric, cross-sectional observational study was conducted in the Rheumatology Department of Careggi Hospital in Florence. Inclusion criteria: female gender, premenopausal age (and ≥18 years old), diagnosis of rheumatic diseases. All patients have been investigated about gynaecological anamnesis and symptoms and subjected to a self-administered validated questionnaire.

Results: From May 4 th to November 30th, 2020, 200 patients were enrolled (mean age 39.1± 8.7 years (M±SD)): 58% arthritis, 40% connective tissue disease and 1.5% systemic vasculitis. In the history, spontaneous, full-term birth in 91% and 93% of patients, respectively, was observed and pre-term birth was reported in 8.1%. 63% of patients were breastfed. In family history, menorrhagia, dysmenorrhea, or chronic pelvic pain were reported in 59%, 55 and 7% of patients, respectively. The first menstruation was at 12.3±2.0 years (M±SD) and mostly woman reported menstrual disorders during adolescence (56% experienced dysmenorrhea and 52% menorrhagia). Menstrual disorders and abnormal bleeding were frequently reported also in adulthood: 71% had dysmenorrhea, 38% heavy menstrual cycles and 9% metrorrhagia. Moreover, 26% of patients referred non- menstrual pelvic pain, 19% urinary pain and 18% pain during defecation. Vaginal symptoms were frequently reported: 36% of patients referred vaginal dryness, 29% burning, 19% recurrent vaginal infections and dyspareunia in 39% of patients. Uterine fibroma was present in 23% and endometriosis in 10% of patients. Fertility problems were reported by 10% of patients in a time frame of 7.5±6.4 years and 30% of patients experienced at least one miscarriage; otherwise, 56% of patients have had at least one full-term pregnancy.

Conclusion: RDs patients show a high prevalence of various gynaecological problems affecting their quality of life. The management of female RDs patients is a challenge for the clinician and should include an accurate evaluation of the gynaecological aspects (menstruation, fertility, maternity, sexuality) as well as a multidisciplinary teamwork (rheumatologist and gynaecologists).

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AB0335

SURVIVAL ASSESSMENT IN PATIENTS WITH SLE AND PULMONARY MANIFESTATIONS IN A COLOMBIAN COHORT WITH 2-YEAR FOLLOW-UP

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Background: Systemic lupus erythematosus (SLE) is a multisystemic autoimmune disease with heterogenous and variable behavior. The frequency of pulmonary involvement ranges from 10-90%, with this variability in occurrence attributed to differences in populations and heterogeneity in detection methods and study designs.

Objectives: To analyze survival in patients with SLE and the presence of pulmonary manifestations according to clinical and demographic characteristics in a cohort of patients in Colombia

Methods: Observational-analytical, retrospective, follow-up study of a cohort of adult patients with SLE. We included 559 adult patients who fulfilled the 2012 SLICC SLE classification criteria and with at least 6 months of disease evolution, treated in a medical center specialized in rheumatology with locations in 6 cities in Colombia between 2015 and 2018. Pregnant patients and those who had incomplete data or visits were excluded. Immunoserological profile was characterized and pulmonary involvement was followed for 1 year. The diagnosis of pulmonary involvement was obtained from the rheumatology report in the clinical chart. The prevalence of pulmonary manifestations and the immunoserological profile were determined and subsequently a logistic regression adjusted for age, sex and level of education was performed to establish the association between pulmonary manifestations and a positive autoantibody profile

Results: Median age was 44.5 ± 14 years, 96.6% were women. In patients with pulmonary compromise 9.7% were smokers, 12.4% had an active alcohol intake, 58.4% had a low socioeconomic status, 38.1% medium and 4.7% high. Pulmonary involvement was present in 20% of patients, the most common manifestations were pleuritis (14.3%), lupus pneumonitis (3.6%), pulmonary hypertension (3.2%), interstitial lung disease (2.3%), pulmonary embolism (2.3%), pulmonary fibrosis (2.14%), alveolar hemorrhage (1.4%), shrinking lung (0.2%). there was no significant difference in the follow up at one year. Immunoserological characteristics shows ANA positivity in 92%, anti-DNA in 53%, ENAS in 97%, with anti-RNP being the most common (41.7%), and low complement levels in 53%. Mortality for pulmonary compromise was 1.4%, and survival at 2 years did not have a statistically significant difference ($p=0.155$)

Conclusion: Survival was not found to be lower in patients with SLE and pulmonary involvement ($p=0.155$) when compared to SLE patients without pulmonary involvement after 2-year follow-up. This finding was independent of age, gender, and educational level. Previous large cohorts like GLADEL and RELESSER describe an association between pulmonary involvement and lower survival HR 2.79 (95% CI: 1.80-4.31), $p < 0.001$ and HR 3.13, (95% IC: 1.56– 6.28, $P = 0.00$ respectively. In the RELESSER cohort pleural involvement and pulmonary embolism was found to have low to minimal impact on survival.

In our cohort pleuritis was the most common finding whereas the other pulmonary manifestations were reported in less than 4% of patients. This difference could explain our differences with other cohorts. Other causes for this difference are a smaller sample size and a short follow-up.

The results of our study do not suggest that there is an association between pulmonary involvement and mortality in Colombian patients with SLE during a 2-year follow-up. We will continue to monitor and report in this regard

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AB0336 PULMONARY MANIFESTATIONS IN A COLOMBIAN COHORT OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Pulmonary manifestations are frequent in systemic lupus erythematosus (SLE) with a frequency of 30-90% that depends on the cohort and the methods used for their identification. The association of this compromise with mortality highlights its importance and the need for biomarkers to adequately predict this complication. We describe the prevalence of pulmonary manifestations, and the clinical and immunoserological characteristics of 551 Colombian patients with SLE

Objectives: We performed an observational and analytic study of a retrospective cohort with adult SLE patients who fulfilled the 2012 SLICC classification criteria and that had a history of at least 6 months of the disease. These patients were treated in a specialized center of rheumatology with presence in six cities of Colombia between 2015 and 2018. We excluded pregnant patients and those with incomplete data for our survey. The first clinic consult occurred between 2015 and 2018, being defined as moment one. The follow up one year later was defined as moment two. We obtained 710 registries that were potentially eligible and analyzed 465 patients at moment two after applying the exclusion criteria

Methods: In 465 eligible patients, 20.5% had pulmonary compromise (93.8% female) with a median age of 42.4 years. The average SLICC Damage Index of 551 patients with SLE was 0.9 in women and 1.05 in men, while the average SDI of patients with pulmonary compromise was 1. The most frequent manifestation was pleural (14.3%), followed by Lupus pneumonitis (3.6%) and pulmonary hypertension (3.2%). Other manifestations and serological characteristics are recorded in Table 1. Of note, ANA homogeneous pattern was the most common (34.5%), anti-RNP positivity was 41.7%, anti-dsDNA positivity was 53.1% and 53.1% had hypocomplementemia.

Results: The prevalence of pulmonary manifestations in our cohort was 20.5%, which is lower than in the previous described GLADEL cohort (28.4%). This could be explained by the regional differences of ethnicities in Latin America and in immune-serological profiles. Anti-RNP positivity was frequent (41.7%) and new pulmonary compromise for one year follow-up was rare. Of note, the mean damage index for our patients with pulmonary manifestations was 1, this could highlight the importance of this organ as a causa of higher damage accrual and mortality, which we will explore in the future

Conclusion: The prevalence of pulmonary manifestations in our cohort was 20.5%, which is lower than in the previous described GLADEL cohort (28.4%). This could be explained by the regional differences of ethnicities in Latin America and in immune-serological profiles. Anti-RNP positivity was frequent (41.7%) and new pulmonary compromise for one year follow-up was rare. Of note, the mean damage index for our patients with pulmonary manifestations was 1, this could highlight the importance of this organ as a causa of higher damage accrual and mortality, which we will explore in the future

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Table 1. clinical and immunoserological characteristics

	n	%
Women	106	93,8
Global mortality	46	8,3
Pulmonary compromise mortality	8	7,1
ANA	104	92
Anti-DNA	60	53,1
ENAS		97,2
Ro	35/87	40,2
La	14/85	16,5
SM	32/88	36,4
RNP	35/84	41,7
	Follow up 1 %	Follow up 2 %
Pulmonary hypertension	3,2	2,8
Pulmonary fibrosis	2,14	2,6
Shrunken lung	0,2	0,2
Pleuritis	14,3	15,05
Lupus pneumonitis	3,6	3,01
Alveolar hemorrhage	1,4	1,3
Pulmonary embolism	2,3	1,93
		P Value *
		0,28
		1
		1
		0,42
		0,85
		0,76
		0,72

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AB0337 ASSESSMENT OF HEALTH-RELATED QUALITY OF LIFE IN SYSTEMIC LUPUS ERYTHEMATOSUS USING THE SLEQoL (SYSTEMIC LUPUS ERYTHEMATOSUS-SPECIFIC QUALITY OF LIFE QUESTIONNAIRE)

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