AB0524

HOW DO WE TREAT DRYNESS IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME? A NATIONWIDE STUDY IN SPAIN FROM THE SJÖGRENSER REGISTRY

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Background: Primary Sjögren syndrome (pSS) is a systemic autoimmune disease whose main characteristic is the involvement of the exocrine glandular system. Thus, its most common clinical manifestation is eye and mouth dryness. No therapy has been demonstrated to significantly modify disease course and, currently, evidence-based therapy for pSS is mainly limited to symptomatic drugs for dryness.

Objectives: To describe the dryness treatment in a cohort of primary Sjögren Syndrome patients.

Methods: SJÖGRENSER registry is a multicentre descriptive cross-sectional study of pSS patients, fulfilling European/American criteria, from 33 Spanish rheumatology departments. Data were collected by reviewing clinical records and interviewing the patients. Informed consent was obtained and local ethics committees approved the study. Variables were analysed by descriptive statistics using means, medians and ranges. Chi square test was used to compare categorical variables. A $p < 0.05$ was considered significant.

Results: Four hundred and thirty seven patients were included (female 95%; median age 58 years). Ninety four per cent of the patients complained of daily, persistent, troublesome dry eyes for more than 3 months, 92% had sensation of sand in the eyes, 16% developed corneal ulcer. Ninety four per cent of the patients complained of dry mouth for more than 3 months and 27% had dental loss. The most frequent ocular dryness treatments were tear substitutes (96%), followed by lubricating ophthalmological ointments (46%), autologous sera solutions (14%), topical corticosteroids (13%), topical cyclosporine (6%). Comparing patients with and without ocular dryness, only pilocarpine and lubricating eye ointment were used significantly with more frequency in symptomatic patients ($p < 0.05$); tear substitutes was used significantly with more frequency in symptomatic patients only in the subgroup of patients that used tear substitutes more than 3 times a day. The most frequent oral dryness treatments were chewing gums or candies without sugar (65%), followed by pilocarpine (56%), special toothpaste (22%), mucolytic agents (20%), saliva substitutes (19%), lubricating oral gel (13%) xylitol (11%) and fluoride (11%). Comparing patients with and without oral dryness, chewing gums or candies without sugar, xylitol and fluoride were not used significantly more frequently in symptomatic patients. In contrast, saliva substitutes, lubricating oral gel, pilocarpine, mucolytic agents and specific toothpaste were used significantly more frequently in symptomatic patients ($p < 0.05$). The median in ESSPRI (Eular Sjögren's Syndrome Patient Reported Index) in SJÖGRENSER cohort was 5.3 (p25-p75, 3.67–7). Only topical corticosteroids and pilocarpine were used significantly more frequently in patients with a dryness VAS ≥ 5 in ESSPRI index.

Conclusions: Despite the high number of symptomatic patients, the use of dryness treatments is limited in pSS patients. Chewing gums or candies without sugar, xylitol and fluoride remain underutilised in this cohort. Despite the dryness VAS score, patients do not seem to use all the symptomatic therapeutic options available.

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AB0525

IDENTIFICATION OF EFFECTIVE PARAMETERS INFORMING THE SELECTION OF INTRAVENOUS CYCLOPHOSPHAMIDE VERSUS MYCOPHENOLATE MOFETIL FOR INDUCTION THERAPY FOR LUPUS NEPHRITIS

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Background: The 2012 EULAR recommendations gave equal weight to intravenous cyclophosphamide (IVCY) and mycophenolate mofetil (MMF) as the induction therapy for class III/IV lupus nephritis (LN). However, there are no effective parameters that could inform the choice the induction therapy (IVCY or MMF) in individual cases.

Objectives: This study examined the patient characteristics that determine the most appropriate treatment for LN: IVCY or MMF.

Methods: We retrospectively examined 29 patients with LN who received induction therapy with IVCY (n=16) or MMF (n=13) between January 1994 and December 2015. Their baseline characteristics and the complete response (CR) rate at

week 24 were analysed. CR was defined as a urine protein:creatinine ratio < 0.5 g/gCr with normal urine sediment.

Results: At baseline, the time since diagnosis of systemic lupus erythematosus (SLE) was longer in the IVCY group than the MMF group (4.8 ± 6.4 vs. 1.3 ± 2.5 years, $p = 0.06$) and the IVCY group had more frequent flares (1.9 ± 2.4 vs. 0.7 ± 1.1 times, $p = 0.08$); however, the differences were not significant. Moreover, there was no difference in age, sex, complement levels, anti-dsDNA antibody titers, anti-Sm/RNP antibody positivity rates, proteinuria, or rate of abnormality in urine sediment at baseline between the two groups. CR was achieved at week 24 in 11/16 patients (69%) in the IVCY group and 9/13 patients (69%) in the MMF group. Considering the 20 patients who achieved CR at week 24, univariate analyses revealed that in addition to a longer time since diagnosis of SLE (4.5 ± 6.6 vs. 1.0 ± 1.7 years, $p = 0.12$) and more frequent flares (1.9 ± 2.8 vs. 0.6 ± 1.0 times, $p = 0.16$), the anti-RNP antibody positivity rate was higher (OR 8.15; $p = 0.07$) in the IVCY group. Furthermore, the positivity rate of anti-RNP antibody differed significantly (OR 12.9; $p = 0.03$) in the multivariate analysis.

Abstract AB0525 – Table 1. Univariate analyses of patients with CR at week 24

	IVCY (n=11)	MMF (n=9)	p value
age (years)	31.2 $\pm$ 10.9	39.6 $\pm$ 18.8	0.23
sex (male,%)	9.1	22.2	0.57, OR=2.71
time since diagnosis of SLE (years)	4.5 $\pm$ 6.6	1.0 $\pm$ 1.7	0.12
flares (times)	1.9 $\pm$ 2.8	0.6 $\pm$ 1.0	0.16
complement C3 level (mg/dL)	48.3 $\pm$ 29.3	47.6 $\pm$ 21.5	0.95
anti-dsDNA antibody (IU/mL)	161.2 $\pm$ 187.4	128.8 $\pm$ 154.2	0.68
anti-Sm antibody (%)	63.6	33.3	0.37, OR=3.27
anti-RNP antibody (%)	72.7	22.2	0.07, OR=8.15

Abstract AB0525 – Table 2. Multivariate analyses of patients with CR at week 24

	Model 1		Model 2	
	OR (95% CI)	p value	OR (95% CI)	p value
age	–	–	0.9 (0.8–1.0)	0.15
sex (female)	–	–	1.2 (0.04–38.8)	0.92
time since diagnosis of SLE	1.1 (0.7–1.7)	0.77	1.0 (0.6–1.6)	0.91
flares	1.5 (0.5–4.2)	0.44	1.7 (0.6–4.4)	0.30
anti-RNP antibody	12.9 (1.3–132.3)	0.03*	31.8 (1.1–892.9)	0.04*

Model 1 was adjusted by all of the characteristics which showed $p < 0.20$ in the univariate analysis; model 2 was adjusted by age and sex in addition to model 1.
 dsDNA, double strand DNA; anti-Sm antibody, anti-smith antibody; anti-RNP antibody, anti-ribonucleoprotein antibody; OR, odds ratio; CI, confidence interval. (* $p < 0.05$)

Conclusions: Although IVCY and MMF are equivalent treatment options for LN, IVCY might be more effective for patients with anti-RNP antibody.

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AB0526

IMBALANCE IN ELASTIN-ELASTASE SYTEM LEADING TO CLINICAL MANIFESTATIONS OF SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: It is believed that in systemic lupus erythematosus antibodies induce a disturbance in the elastin-elastase metabolism, which yields altered soluble isoforms followed by triggering of autoimmunity mechanisms, which damage the elastin-containing tissues.

Objectives: Studying antibody formation in the elastin-elastase system in patients with systemic lupus erythematosus (SLE) using magnetocontrollable adsorbents with an immobilised form of corresponding antigen.

Methods: Sera from 30 donors and 65 SLE patients were studied. Antibodies to elastin and elastase were determined using ELISA test and magnetocontrollable adsorbents with an immobilised form of corresponding antigen.

Results: We analysed changes in the content of antibodies to elastin and elastase in patients with SLE of varying severity assessed using SLAM, SLEDAI scale, and criteria by V.A. Nasonova.