

prior to RTX. At the end of follow-up, no significant change was revealed in FVC when compared with pre-RTX values [58.0 (44.7–58.7),  $p=0.065$ ]. FVC was improved in four patients and stabilized remaining ten patients. All of the patients with improvement of PFTs had moderate or severe restrictive lung disease. High resolution thorax computed tomography (HRCT) findings remained stable in 7 and showed progression of ILD in 3 patients. In total, mRSS remained stable at the end of follow-up when compared with baseline [8.0 (5.2–12.2) vs. 6.0 (4.0–12.2),  $p=0.026$ ].

Table 1. Demographic, clinical and laboratory data of patients

Age/ Sex	Disease duration, years	Cutaneous subset	Auto- antibodies	Previous immuno- suppressive treatment	RTX cycles	Follow-up after RTX, months	FVC (predicted%)
						Before RTX	After RTX
52/F	7.0	Diffuse	ANA, Scl-70	CYC, MMF	2	12	44
39/M	10.1	Diffuse	ANA, Scl-70	MMF	4	24	75
55/F	5.0	Diffuse	ANA, Scl-70	MMF	4	24	75
43/F	16.6	Limited	ANA, Scl-70	CYC, MMF	1	6	38
50/F	4.6	Limited	ANA, Scl-70	CYC, MMF	4	24	52
65/F	13.0	Diffuse	ANA, Scl-70	CYC, MMF	1	6	42
48/F	5.7	Limited	ANA, Scl-70	CYC	4	24	67
54/F	18.9	Diffuse	ANA, Scl-70	CYC, MMF	2	12	39
53/F	15.0	Limited	ANA, Scl-70	CYC, MMF	5	30	53
56/F	5.1	Limited	ANA, Scl-70	CYC	1	6	40
52/F	8.2	Limited	ANA	—	3	12	59
18/F	11.2	Diffuse	ANA, Scl-70	MMF	1	6	63
62/F	4.6	Limited	ANA, Scl-70	CYC, MMF	3	18	51
54/F	13.1	Limited	ANA, Scl-70	CYC, MMF	5	30	54

FVC, forced vital capacity; ANA, antinuclear antibody; Scl-70, antitopoisomerase-1 antibody; CYC, cyclophosphamide; MMF, mycophenolate mofetil; RTX, rituximab.

**Conclusions:** In this case series of SSc patients treated with RTX, improvement or stabilization of pulmonary functions was observed in most of SSc patients. RTX may be useful in SSc-ILD patients with longer disease duration and resistant to conventional immunosuppressive therapies.

**Disclosure of Interest:** None declared

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#### AB0605 VITAMIN D SERUM CONCENTRATION IN EUROPEAN SYSTEMIC SCLEROSIS PATIENTS: CORRELATIONS WITH SEASONALITY, ORGAN INVOLVEMENT AND STANDARD ORAL SUPPLEMENTATION

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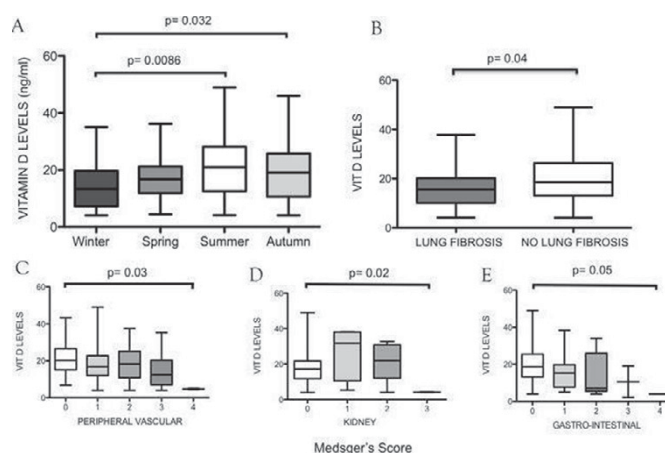
**Background:** Vitamin D deficiency is reported to interfere with immune responses and to correlate with course and outcome in several autoimmune diseases. In systemic sclerosis (SSc), low 25-hydroxyvitamin D (25(OH)D) serum concentration has been recognized.

**Objectives:** To investigate relations between 25(OH)D serum concentration and seasonality, clinical parameters as well as standard oral supplementation, in SSc patients.

**Methods:** 154 SSc patients (mean age 59±15 years, 24.7% diffuse form and 75.3% limited form) were evaluated, at any time of the year, in a retrospective survey. Serum 25(OH)D quantification was performed using the LIAISON 25-OH vitamin D assay (Diasorin, Italy). Pulmonary function test, chest x-ray, lung CT scan, electrocardiography, Doppler echocardiography, renal artery resistive index by eco color Doppler, Dual X-ray absorptiometry, were performed at the time of sample collection. Disease severity scale (DSS) was performed according to Medsger. Drug assumption (glucocorticoids, calcium channel blockers, cyclic intravenous iloprost, endothelin receptor antagonists) and supplementation with vitamin D analogues, were recorded. Non-parametric tests were used for statistical analysis.

**Results:** Average 25(OH)D serum concentration was found to be 18.7±9 ng/ml (<20 classified as deficiency). A significant difference was observed among seasonal 25(OH)D serum concentration (winter: 14.6±7.8 ng/ml, spring: 17.2±7.9 ng/ml, summer 21.43±10 ng/ml, autumn 20.2±10;  $p=0.032$ ) (Figure 1). A significant correlation was found between 25(OH)D serum concentration and presence/absence of bi-basal fibrotic changes at lung computed tomography (CT) scan (average values: 16.1±8 ng/ml and 20±10 ng/ml, respectively,  $p=0.04$ ). Peripheral vascular ( $p=0.03$ ), kidney ( $p=0.02$ ), gastrointestinal ( $p=0.05$ ) Medsger's DSS parameters also were found to correlate with 25(OH)D serum concentration (Figure 1). Interestingly, no influence of treatment with vitamin D analogues (1,000 UI daily) was found regarding 25(OH)D serum concentration in treated (18.8±10 ng/ml) and in not treated (18.7±9 ng/ml) SSc patients ( $p=0.81$ ).

**Conclusions:** In SSc is confirmed a serum 25(OH)D deficiency that we report to be associated with lung involvement, peripheral vascular, kidney and gastrointestinal Medsger's DSS parameters, as well as with seasonality. Supplementation with vitamin D analogues did not influence present results.



Therefore, for successful replacement, supra-physiological oral vitamin D3 doses or programmed UVB light exposure should be considered.

**Disclosure of Interest:** None declared

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#### AB0606 MORTALITY ASSOCIATED FACTORS TO IDIOPATHIC INFLAMMATORY MYOPATHIES (IIMs)

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**Background:** Idiopathic inflammatory myopathies (IIMs) include a group of muscular diseases characterized by the presence of muscle inflammation. The mortality of the IIMs has been estimated between 13 and 50%.

**Objectives:** To evaluate mortality rate and associated factors in patients with IIMs.

**Methods:** Retrospective, observational study, where patients with IIMs (Bohan & Peter 1975) were included. Data were obtained from medical records from patients with myopathy (Increase CK, muscle weakness, cutaneous involvement, interstitial lung involvement) evaluated in a reference rheumatology center of Argentina (1992–2016). Descriptive statistics were performed. Chi2 test, Student's test or Mann Whitney as appropriate multivariate logistic regression analysis.

**Results:** From 102 patients evaluated 89 enter the study, 73% were female. Mean age at diagnosis 48±14 years. Clinical Manifestations: Skin involvement 77% (erythema Heliotrope 51%, rash on the neck and V-sign 60%, back and shoulders 50%, photosensitivity 60%, Gottron's papules 50%, pruritus 33%, erythema peri nail 21%), pulmonary involvement 19% Raynaud 28%, muscle weakness 86%, muscle weakness of the neck 33%, respiratory muscles 13%, myalgias 60% and dysphagia 53%.

Muscle biopsy: performed in 36/89 with pathological findings in 83%, electromyogram performed in 35%. Intensive care unit admission 14/89 (16%). Laboratory: raised CPK 68% with an mean value 3527 IU/ml, raised Transaminase 60%, ANA positive 65%, SSA/RO 25%, Jo1 4.4%, RNP 7%, increased CRP 28% and ERA 59%.

Clinical Subtypes IIMs: Dermatomyositis (DM): 61%, Antisynthet syndrome (AS): 6%, Myopathy associated with connective tissue disease: 19%, Associated with statins: 4, 4%, Polymyositis: 10%. Association with neoplasia was observed in 15%. Treatments: Corticoids pulses 21%, corticoids 97% (mean starting dose 45 mg meprednisone), methotrexate 77%, hydroxychloroquine 36%, azathioprine 30%, cyclophosphamide 16%, intravenous immunoglobulin 15%, biological 10% and cyclosporine 3%.

Univariate analysis

Variables	Mortality (Odds Ratio)	95% IC	
Male sex	3	1,03–8,4	$P<0,039$
Respiratory muscle weakness	5,47	IC: 1,4–20,59	$p<0,007$
ANA positive	6	1,27–27	$P<0,01$
Neoplasms	3,8	1,1–13,3	$P<0,026$
Glucocorticoid pulses	5,7	1,81–17,8	$P<0,001$
Intravenous immunoglobulin	3,67	1,06–12,6	$P<0,03$
Serious infections	17	4,6–61,5	$P<0,000012$

Multivariate analysis of logistic regression

Variable	OR	IC (95,0%)	p
Malignant neoplasm	8,785	1,229	62,797
Serious infections	69,168	10,079	474,666
Glucocorticoid pulses	3,745	0,635	22,092
Male sex	5,899	1,141	30,504
Intravenous immunoglobulin	0,906	0,100	8,217
Respiratory muscle weakness	0,524	0,050	5,527
ANA positive	4,247	0,638	28,259