($p=0.04$). Finally, higher CMV-IgG correlated with diffused cutaneous SSc form ($p=0.023$) and nephropathy ($p=0.036$).

Conclusions: The seroprevalence of EBV and CMV positivity was found significantly higher in the sample of SSc patients. EBV seropositivity (VCA-IgG) was present nearly in the totality of patients (98%). Of relevance, the high presence of CMV-IgG (93%) and CMV-IgM (44.9%) in SSc patients: the last correlated linearly with higher pulmonary arterial pressure values. EBV and CMV infections, among the supposed triggers in several autoimmune diseases, might also play a role in SSc patients, at least with progressive disease.

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AB0724 CARDIO-PULMONARY DISEASE MANAGEMENT IN PATIENTS WITH SYSTEMIC SCLEROSIS: CARDIO-RHEUMATOLOGY CLINIC AND PATIENT CARE STANDARDISATION PROPOSAL

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Background: Systemic sclerosis (SSc) is a chronic connective tissue disease characterised by endothelial dysfunction, dysregulation of fibroblasts with excessive fibrosis of the skin and internal organs and autoimmune abnormalities. Cardio-pulmonary manifestations are common in SSc and their detection in the early stage of the disease as well as their careful follow-up are mandatory in order to counteract their impact on the overall disease outcome. Despite the need of establishing a proper methodology, literature provides few reports about this issue.

Objectives: To evaluate the activity of our Cardio-Rheumatology Clinic in order to optimise diagnostic management of cardio-pulmonary disease in SSc patients.

Methods: We retrospectively analysed data from 350 consecutive SSc patients referred to our University-based Rheumatology Centre and SSc Unit (F/M 308/42; lc/dcSSc 45/305; mean age 50.8±14.7 years; mean disease duration 10.9±7.0 years). All patients underwent general and cardio-pulmonary assessment, in particular they were evaluated in the Cardio-Rheumatology Clinic. The following parameters were considered: physical examination; past and current drugs; blood tests, in particular Erythrocyte sedimentation rate-ESR, C-reactive protein-CRP, CPK enzymes, troponin, NT-pro-BNP, d-dimer, serum autoantibodies, 25-OH-vitamin D; capillaroscopy; pulmonary function tests; high resolution scan of the lungs (HRCT); standard electrocardiogram (ECG) and 24 hour Holter ECG monitoring; Doppler echocardiography; cardiac stress test; coronary angiography and right heart catheterization (RHC); cardiac MRI and CT; vascular ultrasound (intima-media-thickness, carotid-femoral and brachial-ankle pulse-wave-velocity). The clinicians decided to perform these examinations according to clinical picture and current methodologies.

Abstract AB0724 – Figure 1

Results: In the last 12 months we assessed 300 patients with 1st-level screening (cardio-rheumatologic evaluation, standard ECG, Doppler echocardiography, pulmonary function tests, thoracic imaging). Among 2nd-level, 30 procedures of 24 hour Holter ECG and 15 RHC tests were performed. Cardiac MRI, coronary CT angiography and vascular ultrasound were assessed, when requested, as 3rd-level examinations (30 procedures). After 1 year we observed a mean time of 10±5 days between request and clinical cardio-rheumatologic evaluation, 20±12 days to perform 1st-level screening, 25±15 days to execute the 2nd-level examinations. Figure-1 shows Cardio-Rheumatology algorithm for the management of SSc cardio-pulmonary disease.

Conclusions: The activity of our Cardio-Rheumatology Clinic optimises the cardio-pulmonary SSc assessment, determining an early detection of these harmful complications with reduced waiting times which are critical issues. Screening algorithms are useful to stratify the risk and to establish the most appropriate diagnostic-therapeutic protocols, improving outcome of scleroderma patients. The development of a cardio-pulmonary risk score and the standardisation of a patient care approach, according to international quality indexes, could represent further tools to optimise SSc management.

Disclosure of Interest: None declared

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AB0725 SEVERE DYSPHAGIA “POOR PROGNOSTIC MARKER” IN IDIOPATHIC INFLAMMATORY MYOPATHIES

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Background: In Idiopathic Inflammatory Myopathies (MII), 18%–20% of patients have dysphagia.

Objectives: To evaluate the frequency of dysphagia in patients with MII, association with other manifestations of the disease, treatment and evolution.

To evaluate clinical characteristics and evolution of severe dysphagia.

To compare clinical characteristics and evolution of mild-moderate versus severe dysphagia.

Methods: Retrospective, observational study. Patients with a diagnosis of MII were included according to modified classification criteria of Bohan and Peter. Demographic, clinical and complementary studies were recorded. Serious dysphagia was considered: contraindication of oral feeding. Descriptive statistics were performed. Chi2 test, Student's test or Mann Whitney as appropriate.

Results: We included 91 of 106 patients evaluated from 1992 to 2017: 76% female, mean age at diagnosis 48±14 years. 53% presented dysphagia: mild/moderate 62.5% (30/48 pts), severe 37.5% (18/48). Idiopathic dermatomyositis was the most frequent MII in these patients (71%). In patients with dysphagia, proximal muscle weakness was 90%, weakness of neck muscles 45%, weakness of respiratory muscles 27%.

A significant association was found between dysphagia and weakness of respiratory muscles, weak neck muscles, glucocorticoid pulses, gammaglobulin, grave infections and death. (Data not shown in the summary).

In patients with **severe dysphagia**, we observed a significant association with the requirement for mechanical ventilation, hospitalisation in an intensive care unit, serious infections and death (table 1).

When comparing mild-moderate dysphagia vs severe dysphagia, a statistically significant association was found with neck muscles weakness, respiratory muscle weakness, glucocorticoid pulses, gamma globulin use, requirement for mechanical ventilation, hospitalisation in an intensive care unit, severe infections and mortality (table 2).

Abstract AB0725 – Table 1

	Severe dysphagia (SI) 18/91	Severe dysphagia (NO) 72/91	p	OR	IC 95%
Weakness of respiratory muscles	8/18	6/63	0.00054	7,6	2,1–26,6
Weak neck muscles	8/16	6/63	0.00129	8	2,5–26
Glucocorticoid pulses	12/18	8/69	<0,0001	15	4,4–51,9
Gammaglobulin	10/18	7/72	<0,0008	11,60	0,8–10
Intensive therapy unit	7/18	8/72	0,0046	5	1,5–16,8
Mechanical respiratory assistance	6/18	5/72	0,002	6,70	1,7–25
Grave Infections	10/17	11/66	0,0003	7	2,2–22,8
Death	12/18	9/72	<0,0001	14	4,2–46,6

Abstract AB0725 – Table 2

	Dysphagia (mild-moderate) 30/48	Dysphagia (severe) 18/48	p	OR	IC 95%
Weakness of respiratory muscles	4/30	9/18	0.005	6,5	1,6– 26
Weak neck muscles	9/30	13/18	0.004	6	1,6– 22
Glucocorticoid pulses	5/28	13/18	0,0002	12	2,9– 49
Gammaglobulin	3/30	10/18	0,0005	10	2,4– 51
Intensive therapy unit	1/30	7/18	0,0013	18	2–167
Mechanical respiratory assistance	1/30	6/18	0.004	14,50	1,5– 133
Grave Infections	5/27	10/18	0.009	5,50	1,4– 21
Death	3/30	13/18	<0.001	23,5	4,8– 113

Conclusions: Fifty-three percent of patients with MII had dysphagia at some point during their evolution. Severe dysphagia was associated with parameters of disease severity, poor prognosis and increased mortality.

Disclosure of Interest: None declared

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AB0726 INTERSTITIAL LUNG DISEASE IN SCLERODERMA PATIENTS – A PORTUGUESE PORTRAIT

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Background: Systemic sclerosis (SSc) is characterised by inflammation and fibrosis of skin and internal organs. Lung involvement, particularly interstitial lung disease (ILD), is a major cause of morbidity and a leading cause of SSc-related mortality.

Objectives: To characterise SSc patients (pts) with ILD and identify possible predictors for its development.

Methods: A multicenter prospective cohort study using the Rheumatic Diseases Portuguese Register/Scleroderma database was performed. All patients fulfilled ACR/EULAR 2013 classification criteria for SSc. Demographic and clinical data until 15th January 2018 were collected as well as pulmonary function tests (PFTs), including diffusing capacity of carbon monoxide (DLCO). ILD was defined by fibrosis in chest x-ray and/or high-resolution computed tomography (HRCT) scan. Disease progression was defined by an increase from baseline in the area of involved parenchyma and/or development of honeycombing in pts with previous ground glass imaging and/or reduction of more than 15% in DLCO or 10% in forced vital capacity in pts with established ILD. We performed a descriptive analysis of SSc cohort. Logistic regression analysis was used to identify variables independently associated with ILD.

Results: A total of 146 pts were included, 88.4% female, with a mean age of 61.5 ±14.4 years (yrs) and mean disease duration of 14.3±11.3 years. Limited cutaneous SSc (lSSc) was present in 66.4%, diffuse cutaneous SSc (dSSc) in 24%, overlap syndrome in 6.8% and very early diagnosis SSc in 1.4% (information missing in 2pts).

In our cohort, 42 pts (28.8%) presented ILD after 17.5±14.1 years of disease duration, 83.5% of them were female; 45.2% had dSSc and 42.9% lSSc. Anti-Scl70 antibody occurred in 23 pts, anticentromere antibody (ACA) in 8, anti-Pm/Scl in 2, anti-RNA polymerase I in 2, anti-RNA polymerase III in 1 and anti-U3RNP in 1. Ten pts had current/previous smoking habits. Nailfold capillaroscopy (NCP) was available in 23 out of 42 pts and 21 had a SSc pattern (5 early, 6 active and 10 late). Table 1 shows differences between pts with and without ILD.

In multivariate analysis, anti-Scl70 (OR:3.7 95% CI 1.3–10.5) and current/previous digital ulcers (OR:2.2 95% CI 1.9–5.3) were associated with ILD development. ACA had a protective effect (OR:0.3 95% CI 0.1–0.8).

Mycophenolate mofetil was used in 11pts, with 5 of them having previous treatment with cyclophosphamide (CYC; 4 as induction drug). Four pts received azathioprine, half of them as maintenance therapy after induction with CYC. Two pts received rituximab and 1 nintedanib.

During follow-up, disease progression occurred in 17 pts (40.1%), 3 of them under immunosuppression.

Death occurred in 7 pts with ILD, 5 of them with direct relation to lung disease, 14.4 years after the diagnosis.

Table 1 Differences between patients with and without ILD (total=146)

Conclusions: This was the first multicentre Portuguese study about ILD in SSc. In our cohort, ILD occurred in about 30% of the pts and was associated with a mortality rate of 3.4%.

Our results confirm that some variables are associated with pulmonary disease development, and thus its identification may help the clinician to detect pts with a higher risk of early ILD.

Disclosure of Interest: None declared

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AB0727 ANTIBODY PROFILE AND SYSTEMIC SCLEROSIS CLINICAL FEATURES – MYTH OR REALITY?

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Background: Antinuclear antibodies(ANA) occur in 80%–98% of systemic sclerosis(SSc) patients (pts), with different specificities. Anticentromere antibody (ACA), antitopoisomerase I(anti-Scl70) and anti-RNA polymerase III are the commonest and are included in the new SSc ACR/EULAR classification criteria. According to literature, ANA specificities are associated with clinical features of the disease.

Objectives: Evaluate the relationship between antibody profile and clinical manifestations in a cohort of SSc pts.

Methods: We conducted a retrospective analysis of SSc pts followed in our department. Demographic data, disease duration, ANA specificities and clinical manifestations were collected. Mann-Whitney U test and Chi-square were used for comparisons between pts who tested positive or negative for different ANA specificities.

Results: In total, 117 pts were included, 91.5% female with mean age of 60.7 ±15.2 years and mean disease duration of 11.9±10.7 years. Seventy-five pts (64.1%) had limited cutaneous SSc(lcSSc), 26 (22.2%) diffuse cutaneous SSc (dcSSc), 8 (6.8%) very early diagnosis SSc, 7 (6%) overlap syndromes and 1 (0.9%) SSc sine scleroderma. Most (92.3%) were ANA positive, with 53.8% having ACA, 26.5% anti-Scl70, 3.4% anti-U3 RNP, 2.6% anti-U1 RNP, 1.7% anti-PM/ Scl and 0.9% anti-RNA polymerase III and 0.9% anti-Th/To.

Positivity for ACA was significantly associated with female gender (OR: 1.18 95% CI 1.04–1.34) and lcSSc phenotype (OR: 9.43 95% CI 3.86–23.03). ACA was also associated with older age at disease onset (p=0.008). Vascular involvement, defined by current/previous digital ulcers and/or telangiectasias, was also more prevalent in this group (OR: 5.59 95% CI 2.47–12.66). Pulmonary arterial hypertension (group 1 ERS/ECS 2013 classification) was present in 6.3% of pts with ACA. Oesophageal involvement was the second commonest manifestation and occurred in 57.1% of pts with ACA, although this association was not statistically significant. ACA seemed to have a protective effect for interstitial lung disease (ILD) (OR: 0.027 95% CI 0.004–0.213).

Anti-Scl70 positivity was associated with dcSSc phenotype (OR: 9.29 95% CI 3.26–26.5) and ILD (OR: 10.39 95% CI 3.86–27.92).

From the 4 pts with anti-U3 RNP, 3 had dcSSc subtype. The only patient with renal manifestations was anti-U3 RNP positive and had rapidly progressive cutaneous involvement.

Abstract AB0727 – Table 1. Clinical features according to auto-antibody positivity

Antibody	ACA (n=63)	Anti- Scl70 (n=31)	AntiU3- RNP (n=4)	AntiU1- RNP (n=3)	Anti- PM/Scl (n=2)	Anti- RNA pol 3 (n=1)	Anti- Th/To (n=1)
Onset age mean±SD (years)	57.1±12.9	52±20.3	49.4±9.2	48.7±10.4	42.5±14.8	46	26
Female	98.4%	90.3%	75%	66.7%	50%	0%	100%
lcSSc	85.7%	38.7%	25%	0%	50%	100%	100%
dcSSc	0%	54.8%	75%	33.3%	0%	0%	0%
Overlap	1.6%	6.4%	0%	66.7%	50%	0%	0%
Vascular involvement	79.4%	51.6%	25%	33.3%	0%	0%	100%
PAH	6.3%	3.2%	0%	0%	0%	0%	0%
Lung involvement	1.6%	45.2%	25%	0%	50%	0%	0%
Cardiac involvement	0%	3.2%	0%	0%	0%	0%	0%
Oesophageal involvement	57.1%	45.2%	0%	0%	0%	100%	0
Faecal incontinence	4.8%	0%	25%	0%	0%	0%	0%
Renal involvement	0%	0%	25%	0%	0%	0%	0%
MS involvement	12.7%	12.9%	25%	66.7%	50%	0%	0%

Legend: ACA – anticentromere antibody; anti-Scl70 – antitopoisomerase I; lcSSc – limited cutaneous systemic sclerosis; dcSSc – diffuse cutaneous systemic sclerosis; PAH – pulmonary arterial hypertension; GI – gastro-intestinal; MS – muscle-skeletal