hands (23.5%). Lung involvement was defined by HRCT compatible with ILD (64.7%) and abnormal functional exploration (47.1%): restrictive pattern (87.5%) and diminished DLCO (61%). Muscle involvement was defined by elevated CK (52.9%) with a median maximum value of 517 IU/L, myopathic pattern on 8 of 13 performed EMG (61.1%) with myositis found in 4 of them (50%), and inflammatory myositis in 5 of 8 performed biopsies (62.5%). Anti-ARS findings were anti-Jo1 (11), PL12 (2), PL7 (1), anti-EJ (2) and one patient with both PL7 and PL12. Anti-Jo1 predominant clinical pattern was ILD (72.7%), followed by myopathy (63.6%) and concomitant myopathy and ILD (45.5%). Anti-PL12 was associated with ILD, RP, and esophageal involvement and no myopathy. Anti-PL7 patient showed mild myopathy and cutaneous association alone. A combination of anti-PL12 and PL7 was described in one patient who developed ILD with severe myopathy. Anti-EJ patients had pulmonary involvement but no evidence of muscle disease. There was no evidence of cancer in any of our patients. Corticosteroids therapy was administered in most of them (88.2%), and corticodependence was highlighted, being necessary at times to associate one or more immunosuppressants.

Conclusions: Regardless of ASS being a rare disease, 17 patients were collected. Anti-Jo1 was the most described antibody. It is important to note that one patient was found to be positive for both anti-PL7 and PL12 meanwhile they were described as exclusive, showing overlap of clinical pattern with severe muscle injury. This finding suggests that positive results for more than one ASS antibody infer more severity. In contrast with previous literature, pulmonary was more frequent than muscle involvement. The coexistence of both was observed in a small group (35.3%), mostly in anti-Jo1 patients (45.5%). Therefore, we suggest the need to request ASS antibodies in patients with pulmonary or/and muscle involvement at onset although classic clinical pattern is missing.

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AB0615 PERSISTENCE OF HUMAN PAPILLOMAVIRUS IN THE CERVIX OF WOMEN WITH SYSTEMIC SCLEROSIS

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Background: Persistent infection by high-risk oncogenic Human Papillomavirus (HPV) is the main cause of the development of dysplastic or malignant lesions of the cervix. Furthermore, a few life habits, such as smoking, sexual habits and hormonal contraception, are known risk factors for cervical HPV infection. In addition, increased frequency of persistent HPV infection or high-grade intra-epithelial lesions rates was anecdotally described in patients affected by immune-mediated diseases, such as systemic lupus erythematosus, rheumatoid arthritis and systemic sclerosis (SSc), in comparison with the general population.

Objectives: To determine the prevalence of persistent HPV infection in an SSc patients series and its possible correlation with the disease clinical features.

Methods: The study retrospectively evaluated 52 consecutive female SSc patients (age 56.7±11.2SD years, disease duration 12.1±7.4SD years), classified according to the ACR/EULAR 2013 criteria, referring to our university-based Rheumatology Unit. Detection of HPV DNA and viral genotyping in cervical swabs were carried out. Moreover, abnormal Papanicolau test smears were classified using the Bethesda system.

Results: Fourteen(26.9%) patients presented a cervical swab positive for HPV infection,including12 infected by high risk or probable-high risk HPV types. Six (11.5%) patients presented multiple infection ($\geq$2 HPV types), including one case with high-grade intra-epithelial lesion.

Only tabagism was significantly correlated to HPV infection; namely,smoking habit was observed in 41.6% of SSc patients with and in 21.7% of those without HPV infection, respectively; p=0.006); moreoverimmunesuppressive therapies, namely mofetil mycophenolate, cyclophosphamide or rituximab, tended to be associated withHPV infection (presence/absence 21.4 vs 21.7%; p=0.055).

More interestingly, amongSSc patients over 50, HPV infection was found in 9/38 (23.7%) individuals, a frequency markedly higher than that expected in age-matched general population from the same geographical area (5%).

Conclusions: Persistent HPV infection was observed in over a quarter of SSc patients, notably in women over 50. The HPV positivity was not related to SSc clinical features, while a significant association with tabagism and immunesuppressive therapies was evidenced. Considering the possible clinico-prognostic implication on the overall disease outcome, routinely gynaecological screening of SSc female patients ishighly recommendable.

Disclosure of Interest: None declared

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AB0616 COST ANALYSIS RELATED TO SUBCUTANEOUS IMMUNOGLOBULINS IN PATIENTS WITH INFLAMMATORY MYOPATHIES AND IMMUNE-MEDIATED CHRONIC NEUROPATHIES. RESULTS OF AN OPEN LABEL STUDY

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Background: Intravenous Immunoglobulins (IVIg) represent a relevant treatment option in various immune-mediated disorders such as idiopathic inflammatory muscle diseases (IIMD), immune-mediated chronic neuropathies (IMCN), hematologic autoimmune diseases, Still disease, Felty syndrome, systemic lupus erythematosus, vasculitis, some organ-specific autoimmune disease, and atopic diseases. The IVIg treatment is expensive and need of hospital-based assistance for administration; the recent avaibility of home-therapy with subcutaneous immunoglobulins (SCIg) may significantly reduce costs and improve the patient's quality of life.

Objectives: The primary objective was to perform an analysis of costs of SCIg administration in patients affected by IIMD or IMCN compared to that of previous IVIg treatments.

Methods: We prospectively evaluated 6 consecutive patients (3 males and 3 females, mean age 65,3 years, range 63 - 77), 2 affected by IIMD in the context of polymiositis and 4 by IMCN, 3 in the context of vasculitis and 1 in the context of undifferentiated connective tissue disease. All patients were previously treated with IVIg at the dosage of 2g/Kg monthly, (mean monthly dosage 143 g, range 98 – 160, average patient weight 71,5 kg, range 49 - 80), with good clinical and humoral response. After a mean therapy duration of 49.8 months (range 12 – 125) all patients were shifted to SCIg at the dosage of 10 g twice a week (80 g monthly). Each patient was followed-up by humoral and clinical evaluation, including Medical Research Council (MRC) score to quantify muscle strength and INCAT Sensory Score to evaluate sensory symptoms. The costs of the two therapeutic strategies were also compared, excluding indirect costs (absences from work and productivity losses, transport and parking, health care sector costs).

Results: In 5/6 patients, we observed the maintenance of clinical and humoral status after a mean follow-up of 21 months (range 4 - 51), in particular we observed a stability in MRC score in patients presenting loss of strenght and INCAT score in patients presenting sensory symptoms. Furthermore, the treatment with SCIg was well-accepted and preferred to IVIg by all patients. In one patient SCIg were discontinued after 2 weeks, because of the appearance of a haemorrhagic lesions nearby the injection site (in the same patient IVIg have been stopped because of a hypertensive crisis during the infusion). Direct cost associated to IVIg amount to 252€ for 5 g of immunoglobulins (7,056€ monthly, considering a protocol of 2 g/kg/monthly and a patient-weight of 70kg), while direct costs associated to SCIg (20g weekly) amount to 6,400€/monthly, with a saving of 656€/monthly and 7,872€/yearly. In our case-series the annual saving was 9,686.40€/patient (from 86,486.40€ to 76,800€, for IVIg and SCIg, respectively).

Conclusions: Our experience suggests that the shift to SCIg from IVIg in patients affected by IIMD and IMCN is feasible, cost-effective, safe and well-accepted by patients. Further studies are needed to evaluate the effectiveness of SCIg in first-line therapy of these diseases.

Disclosure of Interest: None declared

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AB0617 CLINICAL CHARACTERISTICS OF DIABETES MELLITUS PATIENTS WITH AND WITHOUT SCLEREDEMA BUSCHKE SKIN DISORDER

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Background: Scleredema adultorum of Buschke is a rare disorder characterized by non-pitting hardening of the skin around the neck, shoulders, occasionally the face and the trunk. The most frequent form of scleredema is associated with diabetes mellitus (DM). The histopathologic features of scleredema are characterized by thickened collagen bundles within the reticular dermis that are separated by mucopolysaccharides (mainly mucin) containing fenestrations.

Objectives: To compare clinical data of patients with Buschke-scleredema-DM to diabetic patients without skin involvement patients (Control-DM) with a focus on the late vascular and neurological complications.

Methods: Clinical data of 105 diabetic patients were investigated based on their medical histories and physical examinations. All subjects met the following inclusion criteria: each of their disease duration time of DM had to be more than three years. Twenty-eight patients with Scleredema-DM were collected (three of type 1 and 25 of type 2 diabetes, 19 female, nine male; their mean age (±SD) was 63.0±9.3 and mean DM-duration time was 17.9±9.6 years). Seventy-seven consecutive, age and DM-duration matched patients without skin involvement were investigated as controls (nine patients with type 1 and 68 with type 2 M, 50 female, 27 male, their mean age was 63.3±11.9 and mean DM-duration time was 17.4±10.7 years). For statistical analysis Pearson's Chi-squared, Fisher and Mann-Whitney U tests were used.

Results: In the medical history of the Scleredema-DM group stroke occurred more frequently (8 of 28 cases, 28.6%) compared to the Control-DM group (5/77, 6.5%, /$p<0.01$/). There were no significant differences in the occurrence of myocardial infarction (5/28, 17.9% vs. 10/77 cases, 13.0%), nephropathy (5/28, 17.9% vs. 10/77 cases, 13.0%), retinopathy (13/28 cases 46.4% vs. 28/77, 36.3%) and of peripheral neuropathy (21/28 patients, 75.0% vs. 49/77, 63.6%) respectively. Higher level of cholesterol and triglycerides was present in the Scleredema-DM group compared to the Control-DM cases (mean cholesterol was: 5.7±1.5 mmol/l vs. 4.6±1.2 mmol/l, /$p<0.01$/; triglyceride: 2.3±1.1 mmol/l vs. 1.84±1.6 mmol/l

/p<0.01/), though there were no significant differences in the mean actual level of hemoglobin A1c in the sera, or comparing the body mass index (BMI) between the two investigated groups.
Cholesterol levels were significantly higher in both Scleredema-DM patients group taking /p<0.01/ or not taking /p<0.05/ statins compared to similar control diabetic patient groups. Concerning the triglyceride, also a higher levels of triglyceride were found in Scleredema-DM patients who were taking statins /p<0.05/, compared Control-DM patients who were also taking statins, but no difference were shown in triglyceride levels between the Scleredema-DM group and the Control-DM group both who were not treated by statins.
Conclusions: Scleredema can be assessed by a simple skin-examination and might be a risk factor for stroke in patients with DM. Patients with scleredema are associated with increased cholesterol and triglyceride levels and a higher incidence of stroke compared to matched DM control population.
Disclosure of Interest: None declared
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AB0618 A UNIQUE ULTRASOUND PATTERN OF ADIPOSE TISSUE IN SYSTEMIC SCLEROSIS PATIENTS: A COMPARISON WITH RHEUMATOID ARTHRITIS PATIENTS AND HEALTHY CONTROLS. TWO SIDES OF ADIPOSE TISSUE INVOLVEMENT IN SYSTEMIC CHRONIC INFLAMMATORY DISEASES

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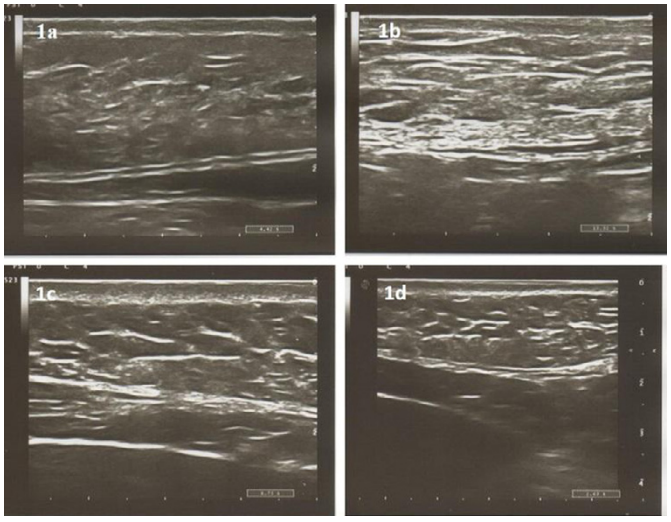
Background: Systemic sclerosis (SSc) and rheumatoid arthritis (RA) are both chronic and systemic inflammatory diseases, involving connective tissue. The adipose tissue is acknowledged as an immune organ that secretes numerous inflammatory signals and it is supposed playing an important role in up-regulation of inflammatory status. A few data are published on altered white adipose tissue (WFT) distribution in patients (pts) with RA. None data are available about WFT distribution in SSc pts
Objectives: We aimed to characterize the subcutaneous adipose tissue (total (sWFT); superficial (SsWFT); inner (IsWFT)) and visceral adipose tissue (vWTF) thickness, evaluated by ultrasound (US) of abdominal adipose tissue, in SSc pts, with different body mass index classes (BMI), comparing with RA pts and healthy controls (HC).
Methods: 42 SSc pts, 57 RA pts and 12 HC were recruited in this study. WFT measurements were assessed, using US (7.5 MHz probe), along the xiphoumbilican line: sWFT thickness (distance between the inner edge of the skin at the outer edge of the alba line (AL)), SsWFT (lobular upper zone of sWFT), IsWFT (sWFT- SsWFT); vWFT thickness (distance between the inner edge of the AL and the peritoneal line).
Results: No subject enrolled had metabolic syndrome. RA pts had thicker vWFT (15.6±7.6mm) than SSc pts (10.8±5.8mm) or HC (10.1±3.8mm) (p=0.001). In particular, the upper-weigh RA pts had vWFT 88% thicker than upper-weight HC and the RA obese pts had vWFT 87% thicker than obese HC. While, the upper-weight SSc pts had vWFT 22% thicker than upper-weight HC, and the SSc obese pts had vWFT 16% thicker than obese HC. Positive correlations were found between all WFT measures and BMI in RA pts and HC (p≤0,05). In SSc pts we found lack of correlation between SsWFT and BMI (r=0.232; p=0.145). Of note, only in SSc pts we observed different US WFT patterns (fig. 1a, fig. 1b) characterized by rearrangement of normal sWFT structure (HC fig. 1c and RA pts fig. 1d). These structural rearrangements consisted in the absence of adipose lobules, replaced by hypoechoic – anechoic areas (fig.1a) (attributable to edema), or by hyperechoic lines and spots (fig.1b) (attributable to fibrotic replacement of subcutaneous abdominal fat), independently by SSc diffuse or SSc limited skin subset.



Conclusions: In SSc and RA the WFT is abnormal. The WFT in RA seems be altered just for dimension and distribution, in particular the vWFT is overexpressed; it might be due to vWFT hyperactivity induced by inflammatory status. In SSc, the WFT is altered in the structure of sWFT. A direct involvement of sWFT in pathologic mechanism of SSc is supposed. An edema phase and a fibrotic phase of abdominal sWFT can be hypothesized, independently by skin involvement. If these findings will be confirmed by fat histological analysis, the US of WFT might be an important tool for the clinicians to identified the earlier stage and/or the active phase (edema) of SSc, in order to support physicians in the decision making about the treatment management.
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AB0619 CONNECTIVE TISSUE DISEASE-ASSOCIATED INTERSTITIAL LUNG DISEASE TREATED WITH CYCLOPHOSPHAMIDE OR RITUXIMAB: A UNICENTRE, OPEN-LABEL AND COMPARATIVE STUDY

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Background: To date, rheumatologists do not have curative treatments for connective tissue disease-associated interstitial lung disease (CTD-ILD) (1), therefore an stabilization of the disease is considered as a therapeutic success. One of the most frequent drugs used for achieving this goal is Cyclophosphamide (CYC); however, in the last years there has been an increasing interest in the use of Rituximab (RTX) as a treatment for CTD-ILD.
Objectives: To compare long-term effectiveness of CYC vs. RTX as a treatment in patients with CTD-ILD.
Methods: Unicentre and retrospective study in which it was analyzed clinical and image data of 26 CTD-ILD patients treated with CYC or RTX between June 2004 and December 2016.
Previously, we checked that baseline characteristics and baseline levels of Pulmonary Function Tests (PFTs) in both groups were similar by using Fisher and T-student tests.
The primary outcome of the study was the stabilization of PFTs or HRTC (High Resolution Tomography Computed Tomography) considering as relapse: a) a deterioration ≥10% in FVC (Forced Vital Capacity), or b) a decrement ≥15% in DLCO (diffusing capacity of carbon monoxide), or c) a worsening in HRCT. The prognostic effect of each treatment on stabilization was evaluated using the Kaplan-Meier method and Long Rank test.
Subsequently, values of FEV1 (forced expiratory volume in one second), FVC, DLCO and DLCO/VA were compared 12 months after the beginning of the treatment with their corresponding baseline levels in both groups, using paired T-test. Finally, direct comparison between the CYC and the RTX groups was performed at the 12-months time point using T-test.
Results: The study includes 20 women and 6 men with an average age of 58.9±14.2 years. 14 patients had a diagnosis of Systemic Sclerosis whereas 12 had other types of CTD.
From the 26 patients, 15 received CYC and 11 RTX, according to the physician's decision. Both groups presented similar baseline characteristics and levels in PFTs.
The Kaplan-Meier method showed that the treatment had an influence on the stabilization of CTD-ILD, although long Rank test was non-significative. The average of months without relapse in CYC and RTX group was 59.79±9.50 and 79.27±7.81 respectively.
Patients in the CYC group did not present any changes in FEV1, FVC, DLCO and DLCO/VA levels during the first year of treatment. In contrast, patients in RTX group showed an increase of all PFTs levels during the first year of monitoring, although these differences were non-significatives. A direct comparison between both treatment groups after 12 months showed lower levels of all PFTs in CYC vs RTX, been DLCO/VA (67.30±10.69 and 86.25±4.59, respectively) statistically significative.
Conclusions: This study suggests, in patients with ILD-CTD, that CYC treatment stabilizes the lung function, whereas RTX shows a tendency to improve it. Also, patients with RTX treatment shows a larger mean time of stabilization than CYC group. However, large scale randomized controlled trials are needed to confirm these results.
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