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FRI0394 NEUROPATHIC PAIN IS ASSOCIATED WITH SKIN THICKNESS IN SYSTEMIC SCLEROSIS PATIENTS

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Background: Systemic Sclerosis (SSc) is a connective tissue disorder characterized by fibrosis of skin and internal organs, vasculopathy and systemic inflammation. To date, few studies assessed pain in SSc patients, (1) namely the neuropathic component. Data is also scarce on defining possible neuropathic pain (NP) predictors in these patients.

Objectives: To determine if patients with SSc have a higher prevalence of NP compared with a group of age and sex matched controls and study possible associations between NP and SSc clinical variables.

Methods: The study evaluated patients diagnosed with SSc fulfilling the SSc classification criteria of the American College of Rheumatology (ACR), older than 18 years old and followed up at our Rheumatology Unit. Forty-eight patients with mean age of 56.98±12.73 years and mean disease duration of 9.77±6.12 years were included. Comparison group comprised 45 age and sex matched controls. Patients and controls were consecutively evaluated at our Unit and NP in 4 questions questionnaire (DN4) was used for assessing the presence of NP. In SSc patients, skin involvement was also evaluated clinically by the modified Rodnan skin thickness score (mRSS) ranging from 0 to 51. Hand mobility (HAMIS) and SSc Severity Scale (SScSS) were also calculated and relevant clinical variables of the disease were collected. Parametric and nonparametric tests were used for comparative analysis. Multivariate logistic regression was used to identify factors associated to NP. Statistical significance was defined as $P < 0.05$.

Results: In our study, prevalence of NP assessed by DN4 was significantly higher in SSc patients comparative to controls (56.2% versus 13.3%, $p < 0.001$). In addition to age and sex, presence of diabetes ($p = 0.541$) was also similar in both groups. In SSc group, patients with and without NP showed some statistically significant differences (table 1).

Table 1. Comparative analysis between SSc patients with and without NP

	NP positive patients (n=27)	No-NP patients (n=21)	P value
Median age, years (IQR)	61 (57–69)	52.38 (42.5–63.5)	0.032
Mean disease duration (years)	11.36±6.55	7.73±4.93	0.04
Diffuse/limited cutaneous subtype (n)	6/21	0/21	0.024
Mean mRSS	22.81±8.74	7.57±3.64	<0.001
Mean HAMIS	10.44±6.16	1.52±2.29	<0.001
Mean SScSS	10.00±4.32	3.90±2.07	<0.001
Digital ulcers n (%)	17 (63.0)	6 (28.6)	0.018
Calcinosis n (%)	15 (55.5)	6 (28.6)	0.062

Multivariate logistic regression revealed that only mean mRSS (odds ratio [OR] =1.90, 95% confidence interval [CI] 1.01 to 3.55, $p = 0.045$) was independently associated with the presence of NP.

Conclusions: To the best of our knowledge, this is the first study evaluating the prevalence of NP in SSc patients in comparison with age and sex matched controls. NP was significantly more prevalent in patients with SSc. Skin thickness assessed by mRSS was independently associated with the presence of NP.

References:

[1] Schieff O et al. Prevalence, severity, and clinical correlates of pain in patients with systemic sclerosis. *Arthritis Care Res (Hoboken)*. 2010 Mar; 62(3):409–17.

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FRI0395 INCIDENCE OF MYOSITIS-SPECIFIC AUTOANTIBODY (MSA) SPECIFICITIES IN SERA REFERRED TO NEW ZEALAND (NZ) MEDICAL LABORATORIES

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Background: Idiopathic inflammatory myopathies can be classified by clinicopathological phenotype into four major groups: overlap myositis (OM), dermatomyositis (DM), immune mediated necrotising myositis (IMNM) and inclusion body myositis (IBM). The different phenotypes associate with distinct MSA specificities although a variable percentage within each group are seronegative and the majority of IBM patients are seronegative¹. No commercial assay for the IBM associated specificity, cN1A, is available. In NZ testing for MSA is restricted to two laboratories: Waikato Hospital (WHL) and Canterbury Health Laboratories (CHL). Both laboratories use the commercial Euroimmun Euroline assay. In addition CHL has developed an ELISA for anti HMGCR autoantibodies and receives referrals from throughout NZ.

Objectives: To define the incidence and specificities of MSA in serum samples referred for testing in New Zealand.

Methods: For the period 3 November 2015 to 2 November 2016 each laboratory information system (LIS) was interrogated for requests for MSA. For the purposes of this report positive results were grouped into the specificities associated with each of the defined clinicopathological phenotypes.

DM: Mi2, Tif- γ , MDA 5 NXP2 SAE1
 OM: Ku, PM-Scl-100, PL75, Jo1, PL-7, PL-12, EJ, OJ
 IMNM: HMGCR, SRP

Results: Of screened sera (n=793, CHL=622, WHL=171) 11% were positive for MSA (88/793). Positive sera were distributed amongst three clinicopathological associated autoantibody specificities: DM 23% OM 50%, IMNM 27%. The most common serum specificities were HMGCR (n=24) and Jo-1 (n=13). No serum with specificities to SRP or OJ was detected. 22/24 sera positive for anti HMGCR had an elevated CPK concentration (CPK>2500u/l in 21/24 and CPK=544 in 1/24, reference range =66–220).

Conclusions: In New Zealand 11% of sera referred for MSA testing were positive. As a group the most common specificities were those associated with OM while the most common antigen specificity was to HMGCR. Anti-HMGCR antibodies were almost invariably associated with major elevations in serum CPK.

References:

[1] Beveniste O, Stenzel W, Allenbach Y. Advances in serological diagnostics of inflammatory myopathies. *Curr Opin Neurol* 2016;29:662–673.

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FRI0396 LEVELS PENTRAXIN 3 AND C1Q IN SYSTEMIC SCLEROSIS: ASSOCIATION WITH PULMONARY ARTERIAL HYPERTENSION AND CLINICAL FINDINGS

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Background: Systemic sclerosis (SSc) is an autoimmune rheumatic disease with unknown etiology that characterized fibrosis and vascular endothelial damage with obliteration of the microvasculature caused from exaggerated synthesis of collagen and extracellular matrix deposition in skin and internal organs. Pentraxin 3 (PTX3) accepted as a vascular inflammatory marker which secreted in early stage of endothelial dysfunction.

Objectives: In this study, we aimed to investigate plasma PTX3 and serum complement C1q levels and their relations with cytokines and pulmonary arterial pressure in SSc.

Methods: Fifty nine patients diagnosed SSc and 28 subjects without inflammatory rheumatic disease recruited to the study. Plasma PTX3, and serum TNF- α , IL-1 β , IL-4, IL-10, INF- γ , TGF- β and complement C1q measured in both groups. Clinical findings and pulmonary arterial pressure of the SSc patients assessed.

Results: Ages of fifty nine with SSc (54 female and 5 male) and 28 control subjects (23 female and 5 male) were 49,47±12.74 and 43,07±13,71 respectively. PTX3, IL-1 β and IL-4 levels found decreased in SSc patients. There were no differentiations between limited and diffuse cutaneous SSc subgroups in terms of PTX3, cytokines and C1q levels. Plasma PTX3 and serum IL-1 β concentrations found decreased only limited cutaneous SSc subgroup comparing controls. According to the immunosuppressive drugs use; PTX3 levels found decreased in using group and TNF- α ve IL-1 β levels found decreased in not using group comparing controls. Significant positive association found between PTX3 and C1q and all cytokines except TGF- β .

Conclusions: PTX3 suggested to be used in the pathogenesis and assessment of disease treatment efficacy of SSc, because of found decreased in SSc patients especially in limited cutaneous and immunosuppressive drugs using subgroups. Associations between C1q, and PTX3 and pulmonary artery pressure highlighted possible roles of both parameters in development of pulmonary hypertension. It is possible to develop preventive treatment strategies with better understanding of these associations. Advanced studies should be carried out for clarifying this condition.

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FRI0397 EVALUATION OF VITAMIN B12 DEFICIENCY AND ASSOCIATED FACTORS IN PATIENTS WITH SYSTEMIC SCLEROSIS

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Background: Vitamin B12 (Vit B12) deficiency is a common condition, which can be manifested with non-specific clinical features or with neurological and/or haematological abnormalities in severe cases. In systemic sclerosis (SSc)