

elevated in patients with systolic eccentricity index >1. NT-proBNP is elevated in patients with decreased VELAP. This study demonstrates the association between certain cardiac biomarkers, fibrosis and vasculopathy peptides and early finding suggesting cardiac remodeling that occurs in some ES patients, which may help to predict the development of PH in those patients.

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AB0677 INDIVIDUAL IMMUNOLOGICAL PREDICTORS OF THE RISK OF LUNG DAMAGE IN PATIENTS WITH SYSTEMIC SCLEROSIS

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Background: A significant role in the formation and development of systemic sclerosis (SSc) belongs to immunogenetic factors and immunopathological mechanisms, so nowadays become important to find immunological predictors of early diagnosis of the disease. An urgent task is timely diagnosing the pulmonary complications as the main causes of high mortality and appointment of adequate therapy and objective assessment of its effectiveness.

Objectives: The main purpose was to develop a personal way of forecasting the risk of damage of the lungs, including its subtype – pneumofibrosis (PF) and pulmonary hypertension (PH) in patients with SSc.

Methods: To address this goal, the following studies performed: clinical, general laboratory, instrumental, immunological, molecular genetics, statistical methods. Adequacy and reliability of the results of mathematical model of the risk of damage the lungs were using criteria Wald and Xi-square. The results show that our model is correct with a probability of error less than 1% ($p=0.001$).

Results: We found that among the analyzed complex interrelated factors in the development of lung damage in patients with SSc significantly influenced: the duration of the disease, miRNA29b, expression levels in the blood concentration of IL17 in serum and blood, neutrophil phagocytic index that we include in the predictive model.

We know that the most significant complications associated with damage to their lungs are pneumofibrosis and pulmonary hypertension, which threatened the rapid development of respiratory failure and a high mortality of these patients. In this regard analyzed immunological and molecular genetic parameters of patients with SSc depending on the development of PF and LH.

We found that among the complex of interrelated factors of the development of PF in patients with SSc significantly influenced the following factors: patient age, miRNA 29b, MCP-1, IFN- γ , TGF- β in serum, oxidative indicator "explosion" of neutrophils, which we have included in the predictive model.

At the same time, the development of PH in patients with SSc significantly affected other clinical and immunological factors: patient age, levels of endothelin-1, IL17 in serum, the number of CD4 + CD25 + Fox P3 + -lymphocytes, CD3 +/CDHLA-DR + -lymphocytes, CD4 + IL17 + -lymphocytes in peripheral blood, which we have included the following predictive model.

Conclusions: The application withdrawn prognostic clinical and immunological and molecular genetic criteria of lungs damage (pulmonary hypertension and pneumofibrosis) will enable medical practitioners to verify early visceral lesions in patients with SSc in time and justified the appointment of basic therapy.

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AB0678 ACCELERATED ACTIVATION OF 25-HYDROXYVITAMIN D TO 1,25-DIHYDROXYVITAMIN D IN SYSTEMIC SCLEROSIS PATIENTS- A RETROSPECTIVE STUDY

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Background: There have been multiple reports of low vitamin D in Systemic

Sclerosis (1, 2). The majority of these reports only measured 25-hydroxyvitamin D (calcifediol) and not 1,25-dihydroxyvitamin D (calcitriol). In our clinical observation, we noted that there may be a population of patients with low calcifediol but normal or high calcitriol.

Objectives: We aim to evaluate the frequency of normal or high calcitriol level in systemic sclerosis patient with low calcifediol levels.

Methods: We performed a retrospective analysis using data collected from a large private practice. We collected data from systemic sclerosis patients who had calcifediol and calcitriol levels ordered between January 2014 and January 2017, patients with sarcoidosis overlap were excluded.

Results: We identified 90 scleroderma patients with documented calcifediol and calcitriol levels and no history of sarcoidosis. Mean calcifediol level was 32.7 ng/mL (SD 20.2) and mean calcitriol level was 60.9 pg/mL (SD 27.6). Total of 42 patients were identified as having calcifediol level of less than 30 (normal >30), only 1 of these patients had calcitriol levels below 10 pg/mL (normal >10) and 6 patients had calcitriol levels above 75 pg/mL. Twenty-three out of 41 patients who had low calcifediol but high calcitriol level also had a CT chest with no diagnostic findings suggestive of sarcoidosis.

Conclusions: Our study suggests that while low calcifediol levels are common in systemic sclerosis patients, not all patients are truly vitamin D deficient and a calcitriol level should be checked before supplementation is initiated. There is some documented evidence of sarcoid and scleroderma overlap at greater than expected frequency which is under recognized and elevated calcitriol level in a systemic sclerosis patient should prompt further evaluation for sarcoidosis (3). We have identified a population of scleroderma patients with low calcifediol, elevated calcitriol level, but no evidence of sarcoidosis. Based on this observation we are planning a prospective study to investigate this further.

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AB0679 THE CLINICAL VALUE OF NAILFOLD CAPILLAROSCOPY IN THE EARLY DIAGNOSIS OF SYSTEMIC SCLEROSIS

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Background: Vascular changes was early pathological changes of SSc, gradually appearing with irreversible fibrosis of the skin and internal organs. Early diagnosis and assessment of the development and efficacy timely, could improve survival in patients with SSc.

Objectives: To assess the value of nailfold capillaroscopy in the early diagnosis of systemic sclerosis (SSc).

Methods: 60 patients with SSc and 55 patients with other connective tissue diseases. Data were extracted on clinical and laboratory parameters. 2013 ACR/EULAR classification criteria and 1980 ACR criteria for SSc were evaluated.

Results: The sensitivity of the 2013 criteria was 91.7% compared to 56.7% for the 1980 criteria ($P<0.001$). The specificity of two criteria was no significant difference. This sensitivity of the 2013 criteria was higher compared to the 1980 criteria among those with lcSSc (95.5% versus 50%). The pattern was consistent among those with disease duration <3 years (90.5% versus 57.1%, $P<0.05$), and disease duration ≥ 3 years (92.3% versus 56.4%, $P<0.05$). The sensitivity and specificity of nailfold capillaroscopy to determine SSc were 86.7% and 43.6%. Patients not fulfilling the two classification criteria were met the very early diagnosis of systemic sclerosis, and often suffering from RP, and had an SSc pattern on nailfold capillaroscopy.

Conclusions: The sensitivity of 2013 ACR/ EULAR classification criteria was higher compared with 1980 ACR classification criteria. The specificity of two classification criteria was no significant difference. This sensitivity of two criteria was higher among those with lcSSc and short disease duration. Scleroderma pattern were significantly associated with the development of systemic sclerosis.

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AB0680 ANALYSIS THE CAUSES AND COUNTERMEASURES OF IGNORING SWALLOWING DYSFUNCTION IN PATIENTS WITH POLYMYOSITIS AND DERMATOMYOSITIS

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Background: The patients with Polymyositis and Dermatomyositis always ignored swallowing dysfunction and most of them eventually had no enough knowledge of this. For this situation, to find out the reasons and take appropriate measures was necessary.

Objectives: To analyze the causes of ignoring swallowing dysfunction in patients with Polymyositis and Dermatomyositis and to explore the corresponding preventive measures.

Methods: The clinical data of 47 patients with Polymyositis and Dermatomyositis in hospital from September 2012 to December 2013 was analyzed retrospectively. The swallowing function was evaluated by the water swallow test, and the patients' knowledge of swallowing dysfunction was surveyed.

Results: Only 2 patients complained of choking during swallowing, with ignorance rate of 95.74%. Positive rate was 40.43% in water swallow test, of which grade II dysphagia proportion was 58%, III grade was 32%, IV grade was 10%. 100% of patients believed that sternal obstruction or dysphagia as swallowing dysfunction. 89.36% of patients didn't think drinking water with bucking as swallowing dysfunction.

Conclusions: The symptoms of limb weakness in patients with Polymyositis and Dermatomyositis may obscure the presence of dysphagia. In addition, the patients do not have enough knowledge about dysphagia that to neglect the swallowing dysfunction. To improve detection rate of swallowing dysfunction in patients with Polymyositis and Dermatomyositis, searching detailed history by listing dysphagia performance and providing water swallow test is necessary.

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AB0681 HIDDEN GENERALIZED EDEMA IN INFLAMMATORY MYOPATHY; GENERALIZED EDEMA IS AN UNRECOGNIZED CLINICAL FEATURE OF MYOSITIS?

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Background: Dermatomyositis (DM)/ polymyositis (PM) are systemic diseases characterized by muscle inflammation, which shows varieties of clinical symptoms and signs. We have experienced cases of DM/PM with generalized edema as reported previously by others (1). Moreover, we found that there were many myositis patients who lost their body weight (BW) after starting of high dose glucocorticoid (GC) therapy. Thus, we hypothesized that hidden generalized edema is a characteristic clinical feature of myositis.

Objectives: To determine whether generalized edema is a hidden clinical feature of myositis. If so, what myositis patients have the feature.

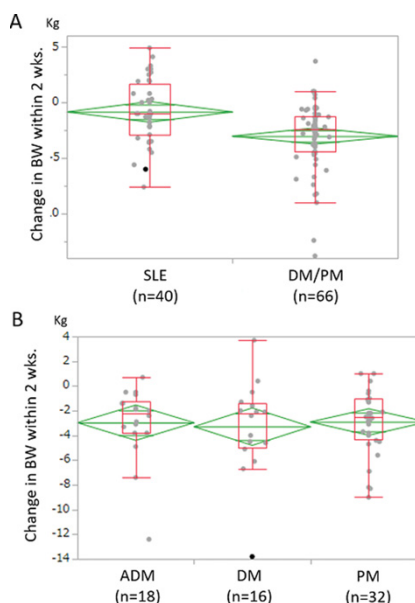
Methods: The study was a retrospective observation study. The subjects were consecutive 67 of DM/PM and 53 of SLE patients who diseases for the first time, admitted our department from April 2007 to September 2016 and received immunosuppressive therapy including over 30mg/day GC. The patients were excluded who had cardiogenic or nephrogenic edema or whose BW data was not available. To detect hidden generalized edema caused by inflammation, we examined the change in BW within 2 weeks after starting immunosuppressive therapy. The clinical features of DM/PM patients with/without BW change were examined through reviewing medical record.

Results: The included subjects were DM/PM 66 patients (M/F; 18/48 with a mean age of 59.4 y.) and SLE 40 patients (M/F; 14/26 with a mean age of 49.8 y.). The body weight of DM/PM and SLE were 56.4±14.0 and 54.7±10.9 kg, respectively. Decrease in BW within 2 weeks after starting the therapy were 3.02±2.99kg of

DM/PM and 0.85±2.87 kg of SLE, which was larger in DM/PM compared to SLE (Fig A). The numbers of patients who lost BW more than 2kg within the 2 weeks were 42 in DM/PM (64%) and 14 in SLE (35%).

Serum albumin levels were slightly decreased by 0.18 g/dl (0.06 to 0.30; 95% CI) in DM/PM, while no significant change was detected in SLE.

In myositis, change in BW was similar among DM, amyopathic DM (ADM) and PM (Fig.B). Moreover, no differences were found in the change of BW between patients with and without male sex, malignancy, interstitial pneumonia, anti-ARS Ab and anti-MDA5Ab. Additionally, between patients with and without BW loss more than 2kg, no differences were found in age, serum TP, Alb and CRP levels before and after treatment and prognosis.



Conclusions: DM/PM patients lose BW by immunosuppressive therapy including GC, which indicates the existence of hidden generalized edema that might be a characteristic clinical feature in inflammatory myopathy.

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AB0682 THE INCIDENCE RATE OF INFLAMMATORY MYOPATHIES IN SLOVENIA

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Background: Annual incidence rates of inflammatory myopathies (IM) vary widely from 1.16–19.0 per 10⁶ of adults. Our aim was to, for the first time, determine the incidence rate of IM in our population.

Objectives: To determine the incidence rate of IM in our population.

Methods: We retrospectively collected incident cases of IM from 1 January 2005 to 31 December 2016 at our department of rheumatology which is a part of an integrated secondary/tertiary university teaching hospital that is the only referral center for two well defined regions representing roughly a third of the national adult population. Tertiary cases are referred to our department from the entire country. We identified the cases by searching the electronic patient records (PRs) for ICD-10 codes M05, M33–35, M60, G73.7, G72.4. The paper and electronic PRs were scrutinized to assess clinical, laboratory and histopathological data. Descriptive statistics was used to describe our group of patients. The adult population size of the two regions served by our department was obtained from the national statistics institute database. The annual incidence rate for IM was then calculated.

Results: During the 12-year observation period we identified 117 new cases of IM from a well-defined adult white Caucasian population aged 18 or above. 38 cases were excluded from analyses since they were referred to our department from outside the two regions we serve on the secondary and tertiary level. Thus, we analyzed 79 cases of IM (63% female; median (IQR) age 67 (55–75) years; 44% ever smokers). The median time to diagnosis was 5 (IQR 3–12) months. We diagnosed 29% patients with dermatomyositis, 25% with anti-synthetase syndrome, 18% with polymyositis, 9% with statin induced necrotizing autoimmune myopathy, 9% with concomitant myositis as a part of connective tissue disease, 6% with paraneoplastic myositis, and 4% with undifferentiated myositis. The IM cases were most often diagnosed in the summer months (32.9%), followed