classify IIM in comparison with 1975 Bohan and Peter criteria in Chinese patients.

Methods: Two hundred and twenty-one in-patients with suspected IIM (including 40 children) were retrospectively included in this study. The performance of 2017 EULAR/ACR criteria was evaluated by sensitivity, specificity, positive predictive value, negative predictive value and classification rate, in comparison to the 1975 criteria, with clinical diagnosis as the gold standard.

Results: The sensitivity, specificity, positive predictive value, negative predictive value of the 2017 EULAR/ACR criteria in IIM classification were 92.7%, 87.0%, 90.1% and 90.4% respectively, in contrast to the 1975 Bohan and Peter criteria of 84.0%, 52.2%, 61.8%, and 77.9% (Fig 1). The classification rate of 2017 criteria was also much better than that of 1975 criteria (90.2% vs. 67.4%). The performance of the new criteria in general, as well as the new criteria with muscle biopsy was better. Most IIM patients were correctly further subclassified by the classification tree. The positive rate of myogenic lesion in electromyography (EMG), muscular inflammatory edema in magnetic resonance imaging (MRI) and specific antibodies of myositis were significantly higher in IIM group than those in control group ($p < 0.001$, all).

Conclusion: The 2017 EULAR/ACR criteria exhibited high sensitivity, specificity, classification rate in the Chinese IIM patients, which was superior to the 1975 criteria. The new criteria showed potentials as clinical classification criteria in the future.

Figure 1. Performance of 2017 EULAR/ACR criteria and 1975 Bohan and Peter criteria.

* referred to the overall assessment, including patients *score of ≥ 5.5 without biopsies and score of ≥ 6.7 with biopsies

REFERENCES

- [1] Bohan A, Peter JB: Polymyositis and dermatomyositis (first of two parts). *N Engl J Med* 1975, 292:344-347.
- [2] Bohan A, Peter JB: Polymyositis and dermatomyositis (second of two parts). *N Engl J Med* 1975, 292:403-407.
- [3] Lundberg IE, Tjarnlund A, Bottai M, Werth VP, Pilkington C, de Visser M, Alfredsson L, Amato AA, Barohn RJ, Liang MH, et al: 2017 European League Against Rheumatism/American College of Rheumatology Classification Criteria for Adult and Juvenile Idiopathic Inflammatory Myopathies and Their Major Subgroups. *Arthritis Rheumatol* 2017, 69:2271-2282.
- [4] Lundberg IE, Tjarnlund A, Bottai M, Werth VP, Pilkington C, Visser M, Alfredsson L, Amato AA, Barohn RJ, Liang MH, et al: 2017 European League Against Rheumatism/American College of Rheumatology classification criteria for adult and juvenile idiopathic inflammatory myopathies and their major subgroups. *Ann Rheum Dis* 2017, 76:1955-1964.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.2716

AB0697C

THE ASSOCIATION OF ANTI-MELANOMA DIFFERENTIATION-ASSOCIATED PROTEIN 5 AND SEASONAL PATTERNS IN ONSET OF IDIOPATHIC INFLAMMATORY MYOPATHIES IN KOREA

In Seol Yoo, Jinhyun Kim, Seong Wook Kang, Su-Jin Yoo, Seungcheol Shim, Chan Keol Park. *Chungnam National University Hospital, Division of Rheumatology, Department of Internal Medicine, Daejeon, Korea, Rep. of (South Korea)*

Background: There was some reports of seasonal association with myositis onset. With the discovery of new myositis-specific autoantibodies

(MSA), detailed grouping of idiopathic inflammatory myopathies was possible. Therefore, we evaluated the seasonal patterns in the onset of idiopathic inflammatory myositis (IIM) with MSA in Korea.

Objectives: To evaluate the correlation between MSA and seasonal patterns of IIM in Korea.

Methods: A total of 90 patients who met the criteria for probable or definite PM or DM and for whom data were collected from 7 referral centers in Korea. 16 myositis-specific autoantibodies were detected by immunoblot with patient's serum. Statistical analyses were performed using a Poisson model that assessed associations of sex, MSA, and month of onset of symptoms or month of diagnosis.

Results: There were no significant seasonal patterns of disease onset in total IIM patients. Among MSAs, anti-synthetase ($n=18$), anti-transcriptional intermediary factor 1 γ (TIF1 γ) ($n=13$), anti-melanoma differentiation-associated protein 5 (anti-MDA5) ($n=12$), and anti-signal recognition particle (SRP) ($n=12$) were analyzed. Among 55 patients with dermatomyositis, patients with anti-MDA5 showed a significant peak in winter ($n=12$, $P=0.05$). This seasonal association was significant in women ($n=10$; $P=0.045$). Patients with anti-synthetase, anti-TIF1 γ or anti-SRP antibodies did not have a significant seasonal onset patterns. There were no significant seasonal patterns in patients without myositis-specific autoantibodies.

Conclusion: Patients with anti-MDA5 showed a seasonality of myositis onset, in winter.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.6579

AB0697D

CARDIOVASCULAR RISK FACTORS ARE HIGHER IN MALNOURISHED PATIENTS WITH SYSTEMIC SCLEROSIS

¹Anna Wojteczek^{*}, Marcin Ziętkiewicz¹, Zbigniew Zdrojewski¹, Sylwia Małgorzewicz². ¹Medical University of Gdańsk, Department of Internal Medicine, Connective Tissue Diseases and Geriatrics, Gdańsk, Poland; ²Medical University of Gdańsk, Department of Clinical Nutrition, Gdańsk, Poland

Background: Cardiovascular disease (CVD) is a well known complication in rheumatoid arthritis and systemic lupus erythematosus. Atherosclerosis (ATS) and its impact on CVD in patients with systemic sclerosis (SSc) still remains unclear. Most of studies are suggesting higher frequency of CVD in SSc in comparison to healthy controls. CVD is a leading cause of death in most developed countries, whereas in SSc population it ranges from 20 to 30%. The etiology of ATS in SSc is unknown. Traditional risk factors, endothelial dysfunction and inflammation can contribute to ATS in SSc population. However, there is lack of data about the impact of the nutritional status on CVD factors in SSc patients.

Objectives: The aim of the study was to determine CVD factors among SSc patients depending on the nutritional status.

Methods: In 55 patients with SSc (72.7% well-nourished, 18.1% malnourished, 9.1% pre-cachexia) and 49 healthy controls we measured markers of endothelial dysfunction (asymmetric dimethylarginine - ADMA), inflammation (C-reactive protein - CRP, high sensitivity C-reactive protein - hsCRP, interleukin 6 - IL-6) and dyslipoproteinemia (oxidized low-density lipoprotein - ox-LDL, high-density lipoprotein- HDL, low-density lipoprotein - LDL and total cholesterol). Nutritional status was determined with subjective global assessment (SGA), body mass index (BMI), bioelectrical impedance analysis (BIA) and anthropometric measurements.

Results: Well-nourished SSc patients had significantly higher level of IL-6 (6.4 ± 10.1 vs. 2.8 ± 3.6 pg/ml; $p=0.002$) and lower HDL cholesterol (49.9 ± 11.6 vs. 57 ± 13.6 mg/dl; $p=0.011$) in comparison to healthy control. In malnourished SSc patients there was higher concentration of ADMA (1.68 ± 0.53 vs. 1.24 ± 0.34 μ mol/l; $p=0.003$), CRP (18 ± 28.8 vs. 2.4 ± 2.5 mg/l; $p=0.04$), IL-6 (21.6 ± 34.9 vs. 2.8 ± 3.6 pg/ml; $p=0.004$) and lower HDL cholesterol (42.5 ± 18.3 vs. 57 ± 13.6 mg/dl; $p=0.01$) in comparison to healthy control. Pre-cachexia SSc group had significantly lower total cholesterol (166.8 ± 28.5 vs. 219.3 ± 40.9 mg/dl; $p=0.008$) and LDL cholesterol (96.8 ± 21.6 vs. 139.6 ± 36 mg/dl; $p=0.007$). There were no differences in concentration of oxLDL and hsCRP in those groups.

Conclusion: Nutritional status may play role in risk of CVD in SSc patients. Although its contribution to morbidity and mortality rates in CVD in SSc is yet to be established.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.8086