MONOCYTES TO LYMPHOCYTES RATIO IS CORRELATED WITH DISEASE ACTIVITY IN BEHÇET’S DISEASE

Y. Huang, S. Zheng, T. Li, F. Feng, W. Deng, O. Huang, Z. Huang, Z. Huang, X. Pan. Department of Rheumatology and Immunology, Guangdong Second Provincial General Hospital, Guangzhou, China

Background: Behçet’s disease (BD) is a complex, inflammatory multisystem disorder. Since the lack of universally recognised pathognomonic laboratory test, the diagnosis relies heavily on clinical findings. Currently, the Monocytes to lymphocytes ratio (MLR), Neutrophils to Lymphocytes ratio (NLR), Platelets to Lymphocytes ratio (PLR) and Red blood cell Distribution Width(RDW) have been demonstrated as a assessment of disease severity in many rheumatism diseases. Nevertheless, to our knowledge, only a few studies have investigated NLR, PLR, RDW in patients with BD.

Objectives: The aim of this study is to determine MLR, NLR, PLR and RDW in BD and to investigate their relationships with disease activity.

Methods: A total of 37 patients with BD fulfilling the criteria of the International Study Group for BD and 37 age and gender-matched healthy controls were enrolled in the study retrospectively. MLR, NLR, PLR, RDW, C-reactive protein (CRP) level and Erythrocyte Sedimentation Rate(ESR) level were evaluated. The correlation between the variables were tested with Pearson correlation. Area Under Curve(AUC) value, sensitivity, specificity, and the optimal cut-off values were determined using Receiver Operating characteristic Curves (ROC). According to the optimal cut off value, BD patients were divided into low-value group (the optimal cut off value) and high value group (the optimal cut off value). The patient’s clinical characteristics between the two group were compared.

Results: The MLR, NLR, PLR and RDW were (0.37±0.24), (2.91±1.95), (155.09±55.08) and (13.83±1.77) in BD group, while (0.18±0.04), (1.45±0.46), (115.66±28.01) and (13.07±1.19) in control group, the difference was significant (P<0.05; r=0.611, P<0.05; r=0.496, P<0.05) and CRP(r=0.713, P<0.05; r=0.785, P<0.05). The ROC curve results showed that the AUC of MLR, NLR, PLR and RDW for BD were 0.935, 0.841, 0.815 and 0.94, respectively.

Conclusions: MLR was elevated in BD patients as compared to control group, having a close relationship with disease activity.

REFERENCES:

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Giant Cell Arteritis is Comorbid with Tuberculosis

Y. Zhang1, D. Wang2, Y. Yin1, X. Zeng1, 1General Internal Medicine, Peking Union Medical College Hospital, Beijing, 2Neurology, Nanfang Medical College Hospital, Guangzhou, China

Background: Giant cell arteritis (GCA) is a medium- and large- vessel vasculitis with an onset age after 50 years, whereas Takayasu arteritis (TA) is a rare large- vessel vasculitis with an onset age younger than 40 years. The association between TA and tuberculosis (TB) was suggested. However, the association between GCA and TA was rarely reported.

Objectives: To understand the association between TA and TB

Methods: Clinical data between November 1998 and October 2017 at PUMCH, Beijing, China, were retrospectively reviewed. Ninety-one patients diagnosed with GCA were included in the study. Precise clinical data were collected and analysed.

Results: A total of 20 patients (22.0%) had a history of active tuberculosis and received anti-tuberculosis therapy. On comparing the clinical features of the patients with TB and those without TB, obvious weight loss (p=0.011), lower percentage of dyslipidemia (p=0.042), higher percentage of anti-phospholipid antibody (p=0.011), and lower white blood cells (p=0.006) were noted in the TB group.

Abstract AB0715 – Table 1. Clinical features and comorbid diseases of the patients with TB and without TB

Conclusions: This study demonstrated that the percentage of TB history in patients with GCA was higher than that in the general population. The definite association between TB and GCA remains unknown. Hence, further studies are required to elucidate the mechanisms underlying TB in the pathogenesis of GCA.

Clinicians should recognise the possibility of comorbid TB in patients with obvious weight loss and relatively lower white blood cell count.

REFERENCES:

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AN AUTOPSY CASE OF SYSTEMIC SCLEROSIS WITH SEVERE GASTROINTESTINAL INVOLVEMENT AND LITERATURE REVIEW

A. Aoki1, H. Hirano2, H. Kobayashi3, T. Okubo1, Y. Umebayashi1, H. Oka1. 1Dept. of Rheumatology; 2Dept. of Pathology; 3Dept. of Dermatology, Tokyo Medical University Hachioji Medical Center, Tokyo, Japan

Background: The gastrointestinal tract (GIT) is the second most common internal organ affected by systemic sclerosis (SSc). The rate of SSc patients who develop severe GIT symptoms is lower than 10%, although various degrees of chronic intestinal pseudo-obstruction (CIPO) may occur in as many as 40% of cases (1,2).

Objectives: To report an autopsy case of SSc with severe intestinal involvement and review the associated literature.

Methods: We will present the clinical features and autopsy findings of a SSc patient and literature concerning Japanese SSc autopsy cases associated with severe intestinal involvement, found Iku-cho and Pub-med on Internet.

Results: A 69-year-old Japanese woman was diagnosed with diffuse cutaneous SSc from skin sclerosis, Raynaud’s phenomenon, and mild intestinal pneumonia in January 2013. The antinuclear antibody was positive (1:160, speckled pattern), but the specific antibodies, including the anti-RNP, topoisomerase I, and centromere antibodies, were negative. In August 2015, at the age of 71, she was hospitalised for vomiting and abdominal pain. Plain abdominal radiograph showed dilation of the small bowel with air-fluid levels. Abdominal CT revealed large dilation of the small bowel in the absence of any mechanical obstruction. These findings were consistent with CIPO. Her symptoms soon improved by decompression with a long intestinal tube. But she experienced frequent relapse of CIPO. During the third hospitalisation in May 2016, an abdominal CT showed pneumatosis cystoides intestinales (PCI) and free air in the peritoneal cavity. Medical management failed to control the CIPO. Her general conditions had gradually worsened with weight loss of 10 kg in 3 years. Home parental nutrition was initiated in January 2017. On May 2017, she developed severe pneumonia after vomiting, and her condition gradually deteriorated. She finally succumbed to her illness and an autopsy was performed. The whole alimentary tract except for the duodenum showed a thinning of the lamina propria and atrophy of the smooth muscular layers. Intimal proliferation and narrowing of arterioles were also noted. There was no-specific interstitial pneumonitis in the both lower lobes and diffuse alveolar damage in the both of upper lobes of the lungs. Vasculopathy was also seen in the lungs and heart.

The cases in the literature are summarised in table 1. Vascular damage and/or smooth muscle atrophy were present in all cases.

Abstract AB0716 – Table 1. Autopsy cases of systemic sclerosis associated with severe gastrointestinal symptoms in Japan

<table>
<thead>
<tr>
<th>Case No.</th>
<th>Publication year</th>
<th>Age at death</th>
<th>Sex</th>
<th>Cause of death</th>
<th>GIT symptoms</th>
<th>Sclerosis</th>
<th>Intimal proliferation and narrowing of arterioles</th>
<th>Cause of death</th>
<th>GIT symptoms</th>
<th>Sclerosis</th>
<th>Intimal proliferation and narrowing of arterioles</th>
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<th>GIT symptoms</th>
<th>Sclerosis</th>
<th>Intimal proliferation and narrowing of arterioles</th>
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<td>49</td>
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</table>

M: male; F: female; yrs: years; mo: months; GIT: gastrointestinal tract; IP: interstitial pneumonia; CIP: chronic intestinal pseudo-obstruction; PCI: pneumatoses cystoides intestinales; 1) Intimal proliferation and narrowing of the small arteries

Conclusions: Vasculopathy in SSc involves small vessels, and it precedes fibrosis. The triggering event of vasculopathy is unknown, but the narrowing of intestinal arterioles causing hypoxia might be responsible for dysmotility of GIT.

REFERENCES:


Disclosure of Interest: None declared
(Raynaud’s phenomenon, pulmonary interstitial involvement, digital ulcers, digestive alterations, presence of sclerodermal renal crisis) and activity index variables (modified Rodnan skin score, HAQ-DI, SHAQ-VAS).

**Results:** Four patients were included (75% women). The median age at the time of the AHSCT was 36.5 years (range 27–51). In all cases, the initial diagnosis was diffuse cutaneous ES, refractory to corticosteroids and at least one DMARD. Prior to autologous hematopoietic stem-cells transplantation, the clinical manifestations presented were a) severe Raynaud’s phenomenon (100%) with significant joint and cutaneous involvement, b) digital ulcers (50%); c) interstitial lung disease (50%) and d) sclerodermal renal crisis (25%). In 3 of the 75% the antitopoisoamerase antibodies were positive. The conditioning treatment for the autologous hematopoietic stem-cells transplantation was cyclophosphamide at high doses (50 mg/kg x 4 days) and anti-thymocyte globulin. In 3 patients (75%) there were slight post-transplant complications (febrile neutropenia, diarrhoea) after a median follow-up of 6.5 years (range 1–15).

The response to AHSCT is summarised in table 1. All patients showed values <1 to autoantibodies negative. 3. BS 33 year old female who underwent cosmetic surgery. 28/51 6/51 0 0/13

**Conclusions:** Autologous hematopoietic stem-cells transplantation can be a therapeutic option in refractory and severe SS. These hopeful data must be ratified in larger studies.

**Disclosure of Interest:** None declared

**AB0719**

**CLOSE TEMPORAL ASSOCIATION BETWEEN SILICONE COSMETIC SURGERY AND SYSTEMIC SCLEROSIS ONSET**

**A. Suli, S. Paolino, E. Alessandri, B. Ruaro, M. Pendolino, C. Pizzorni. Research Laboratory and Academic Division of Clinical Rheumatology, Department of Internal Medicine, University of Genova, San Martino Polyclinic Hospital, Genova, Italy**

**Background:** The pathogenesis of systemic sclerosis (SSc) still remains unclear; however it is increasingly thought to result from interactions between environmental factors and epigenetic features leading to the onset and progression of SSc in genetically susceptible patients.1 Case reports of women with silicone breast implants who developed SSc have been published, but several case-control series and prospective studies in connective tissue diseases (including SSc) failed to find an increased risk of SSc after silicone cosmetic surgery.2 How-ever, several biases may be recognised in these studies, i.e. heterogeneous cohorts of enrolled patients not selective for SSc, non homogeneous either disease duration or disease stage at study entry. For these reason the possible effect of silicone implants as immune adjuvants is not clear.3

**Objectives:** Retrospective study to find out patients who developed SSc after cosmetic surgery.

**Methods:** The clinical files of 110 female patients with systemic sclerosis were retrospectively evaluated. Among these, four patients showing a history of silicone cosmetic surgery (3.6%) were identified, and clinical data collected.

**Results:** The clinical data of the four patients are below reported. 1. LS 28 year old female who underwent cosmetic breast prostheses: two years later she complained of Raynaud’s phenomenon (RP), and one more year later aggressive diffuse cutaneous SSc, along with anticientromere antibodies (ACA) positivity. 2. PJ 38 year old female who underwent cosmetic breast prostheses: one year later she experienced RP and one more year later aggressive diffuse cutaneous SSc; anti-nuclear antibodies were positive with a speckled pattern, but specific SSc-related autoantibodies negative. 3. BS 33 year old female who underwent cosmetic breast prostheses: two years later she complained of RP and one more year later limited cutaneous SSc with ACA positivity; SSc clinical condition partially improved and its progression stopped after breast prostheses removal. 4. CM 58 year old female who underwent cosmetic lip silicone application: one year later she complained simultaneous onset of RP and aggressive diffuse cutaneous SSc with anti-Topoisomerase positivity; she died during follow-up.

**Conclusions:** This study reports a prevalence of 3.6% of silicone cosmetic surgery before SSc onset. The close temporal association between silicone implant and disease development suggests a possible role of silicone in SSc pathogenesis. Specifically addressed clinical studies or big-data studies need to rule out this matter.

**REFERENCES:**


**Disclosure of Interest:** None declared

**AB0720**

**SYSTEMIC SCLEROSIS AND CANCER DEVELOPMENT: A SINGLE-CENTRE EXPERIENCE**

**E. Pelechats, E. Kaltsonoudis, P. V. Voulgari, A.A. Drosos. Rheumatology Clinic, Department Of Internal Medicine, MEDICAL SCHOOL, UNIVERSITY OF IOANNINA, Ioannina, Greece**

**Background:** Systemic Sclerosis (SSc) is an autoimmune connective tissue disease with multisystem involvement, and sometimes devastating results. In bibliography there are reports that scleroderma patients present a higher incidence of risk for cancer when compared with the general population. However, different estimates have been reported.

**Objectives:** The purpose of the present study was to evaluate the frequency of cancer development (CD) in a cohort of patients with SSc.

**Methods:** Patients that fulfilled the 2013 American College of Rheumatology/European League Against Rheumatism criteria for SSc and were followed up since 1999, were included. Date of disease onset, disease duration, autoantibodies, age, pulmonary hypertension, comorbidities and the type of CD have all been taken into account, during the period 1991–2016.

**Results:** Seventy-nine SSc patients have been included. 46 with limited (lcSSc) and 33 with diffuse cutaneous Systemic Sclerosis (dcSSc). Six of them, (7.6%) developed different types of cancer. Most of them were adenocarcinoma. More specifically, 2 developed pulmonary adenocarcinoma (1 with lcSSc and 1 with dcSSc), 1 follicular carcinoma of the thyroid gland (lcSSc), 1 colorectal adenocarcinoma (lcSSc), 1 B-cell lymphoma (MALT lymphoma), and 1 prostate adenocarcinoma (lcSSc). Five out of six were female patients. Mean age at the time of cancer diagnosis was 66.8-years-old, while SSc has been diagnosed at the mean age of 49.4 years. Mean time of developing any type of cancer was 15.8 years after SSc diagnosis. The diagnosis of cancer was done the last 20 months. All patients were non-smokers, had gastro-oesophageal reflux disease and pulmonary fibrosis, while 4/6 had also pulmonary hypertension and were under treatment with phosphodiesterase 5 inhibitors and bosentan. Scleroderma patients with CD have been referred to the corresponding oncology clinic for further treatment.

**Conclusions:** The present study on SSc and CD provides data showing a potential association between the two entities. We found a high frequency of cancer development in patients with SSc (7.6%). Thus, a careful monitoring and screening is required when physicians follow-up scleroderma patients.

**Disclosure of Interest:** None declared

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