Background and aims Myositis, especially acute myositis, is a rare manifestation of systemic lupus erythematosus (SLE). Here we report a case of acute myositis concomitant with lupus pleuritis.

Methods A 29-year-old woman with an 8 year history of SLE was admitted to our hospital because of pleuritic chest pain. Her initial diagnosis as SLE was made by malar rash, photosensitivity, oral ulcer, oligoarthritis, leukopenia and the positivity for antinuclear antibodies as well as anti-Sm. She has shown recurrent pleuritis afterwards. The Chest CT revealed bilateral pleural and pericardial effusion. Bacterial cultures and viral antibody tests were negative, and the daily dose of prednisolone was increased from 5 mg to 20 mg. Despite the improvement in the pleuritic chest pain, she developed acute myalgia with the elevated value of serum muscle enzymes, positive signals in the muscle/fascia by the ultrasound and MRI, and myopathic changes in the electromyogram examination. After the administration of intravenous steroid pulse therapy for 3 days followed by prednisolone 40 mg/day, all the myositis signs and symptoms subsided, which was also confirmed by the ultrasound.

Conclusions The present case suggests that acute myositis may develop as a manifestation of SLE exacerbation and the ultrasound evaluation may be useful in the diagnosis and the follow-up of myositis.

Abstract 182 Table 2: Multivariate analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR</th>
<th>95% CI</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (&gt; 35 years)</td>
<td>1.016</td>
<td>1.001 - 1.032</td>
<td>0.037</td>
</tr>
<tr>
<td>Exposure to steroid in the previous year</td>
<td>0.964</td>
<td>0.975 - 0.959</td>
<td>0.007</td>
</tr>
<tr>
<td>Persistent lymphopenia</td>
<td>2.42</td>
<td>1.102 - 5.344</td>
<td>0.028</td>
</tr>
</tbody>
</table>

Background and aims To study the effect of the metabolic syndrome (MetS) on organ damage and mortality in patients with SLE.

Methods Consecutive patients who fulfilled ≥4 ACR criteria for SLE were assessed for the presence of the MetS in 2010. The MetS was defined by the updated joint consensus criteria, using the Asian criteria for central obesity. Longitudinal data on organ damage, vascular events and mortality were retrieved from our database. The association of the MetS with new organ damage and mortality was studied by logistic regression.

Results 577 SLE patients were studied (93% women; age=41.2 ±13.4 years; SLE duration=9.3±7.2 years). The mean follow-up time of the patients was 66.3±1.8 months. 85 (14.7%) patients qualified the MetS. New organ damage and vascular events developed in 128 (22%) and 23 (4.0%) patients, respectively. Thirty-nine (6.8%) patients died. Patients with MetS, compared to those without, had significantly higher SDI accrual at their last visits (0.70±1.0 vs 0.26±0.6; p<0.001). New vascular events (11% vs 2.8%; p=0.001), all-cause mortality (14% vs 5.5%; p=0.003), death due to vascular complications (7.1% vs 0.2%; p<0.001) were significantly more common in patients with MetS than those without. Logistic regression revealed that the MetS was significantly associated with new damage in the ocular, renal, cardiovascular and endocrine system, adjusted for age, sex, SLE duration and the antiphospholipid antibodies. The presence of the MetS showed a significant increase in vascular mortality after adjustment for the same covariates (OR 30.3 [3.42–268]; p=0.002).

Conclusions The MetS is significantly associated with new organ damage, vascular events and mortality in patients with SLE.

Characteristics and Risk Factors for Tuberculosis Infection Among Filipino Patients with Systemic Lupus Erythematosus

Background and aims To describe characteristics and risk factors for tuberculosis (TB) among Filipino systemic lupus erythematosus (SLE) patients.

Methods We analysed SLE patients diagnosed with TB at Lupus Clinics of University of Santo Tomas Hospital, Manila, Philippines. TB categories included pulmonary (PTB) only, extra-pulmonary (EPTB) single site, disseminated (DTB) defined as >1 organ involvement. Disease characteristics, cumulative steroid, average daily prednisone dose and immunosuppressive use over 3 months preceding TB diagnosis, and outcomes were compared among the 3 TB categories by one-way analysis of variance (ANOVA) and multivariate discriminant analysis.
Results 87 patients (82 females) had mean age 29.23 ±13.13SD (6 – 62) at TB infection, mean SLE disease duration 3.40±4.44SD (<1–23) years. There were 59 (67%) PTB, 5 (6%) EPTB, 23 (27%) DTB. Extra-pulmonary sites included 8 meningitis or brain abscess, 7 soft tissue abscess, 7 pleural effusion, 3 genitourinary, 3 arthritis, 1 hepatobiliary, 1 ileocecal, 1 cutaneous. Average SLEDAL score was 4.74±3.19SD (0 – 14), nephritis in 31 (35.63%). Average cumulative prednisone was 15.29±19.38SD (0.5–86.4) grams; mean daily prednisone was 13.87±10.5SD mg (0 – 50) with 22 patients (25.29%) taking immunosuppressives 3 months preceding TB. Significant risks for DTB were nephritis (p=0.017) and prednisone >11 mg/d (p<0.05). Sixty three (72.41%) successfully completed anti-TB treatment. Among 24 deaths, 9 were attributed to TB (6 disseminated, 3 PTB respiratory failure), 15 due to active lupus.

Conclusions In this cohort, nephritis and recent prednisone dose >11 mg/day were significant risk factors for disseminated TB which is associated with poor prognosis.

185 SERUM TUMOUR TUMOR NECROSIS (TNF)-LIKE WEAK INDUCER OF APOPTOSIS (TWEAK) AND LEPTIN AS BIOMARKERS OF ACCELERATED ATHEROSCLEROSIS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND ANITPHOSPHOLIPID SYNDROME

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Background and aims Patients with systemic lupus erythematosus (SLE) and antiphospholipid syndrome (APS) are at increased risk of atherosclerosis, and occurs much earlier compared to the general population even after accounting for traditional risk factors. Aim of the work: To examine the association between serum TWEAK, leptin and subclinical atherosclerosis in SLE and APS.

Patients and methods Serum tumour necrosis factor (TNF)-like weak inducer of apoptosis (TWEAK) and leptin were measured in 30 SLE patients, 26 SLE patients with secondary APS (SLE-APS), 14 with primary APS (pAPS) and 20 age and sex matched control. The SLE disease activity index (SLEDAl) was assessed in SLE patients. The intima media thickness (IMT) was measured by carotid ultrasound.

Results Serum TWEAK was significantly higher in patients with pAPS (945.1±16.2 pg/ml) than in SLE-APS (755.3±59.9 pg/ml), SLE patients (499.2±47.1 pg/ml) and control (129.6±18.6 pg/ml) (p<0.001). Also, serum leptin was significantly higher in pAPS patients (14.0±2.8 mg/dl) compared to that in SLE-APS (6.5±0.9 mg/dl), SLE patients (3.8±1.2 mg/dl) and control (1.6±0.6 mg/dl) (p<0.001). The IMT was significantly increased in the pAPS patients compared to SLE-APS group (p<0.001), SLE patients (p=0.006) and to the control (p<0.01). A significant correlation was found between TWEAK with the body mass index and high density lipoprotein in SLE-APS and inversely with the random blood sugar and thediabetic blood pressure in SLE patients. Serum leptin only significantly correlated with the totalleucocytes count in SLE patients.

Conclusions Patients with pAPS are more liable to develop premature atherosclerosis even in the absence of the traditional risk factors.

186 FERROKINETICS IN ANAEMIA ANAEMIA OF CHRONIC DISEASE ASSOCIATED WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND IRON DEFICIENCY ANAEMIA

E Mostafa, Cairo, Egypt

10.1136/lupus-2017-000215.186

Background and aims Systemic lupus erythematosus is a common autoimmune disease occurring predominantly in women. Anaemia is common in SLE patients, the most common cause of anaemia is anaemia of chronic disease. The key mediator of anaemia of chronic disease is Hepcidin.

The aim of this study was to determine the role of hepcidin in anaemia of chronic disease in SLE and its role in differentiation between ACD and IDA.

Methods The study was conducted on 50 patients with SLE (25 patient with ACD and 25 patient without anaemia), 20 patients with iron deficiency anaemia (IDA) and 15 healthy controls. All study persons underwent full clinical assessment, CBC, ESR, serum iron, TIBC, ferritin and hepcidin measured by ELISA.

Results Serum hepcidin was significantly higher in SLE group than IDA than control groups, with mean+SD in SLE group (7.8±3.4 mg/dl) compared to mean+SD (4.6±2.5 mg/dl) in IDA group and mean+SD (2.2±0.8) in the control group with P value<0.001, with sensitivity 75% and specificity 60% in detection of anaemia in general and with sensitivity 91% and specificity 67% in anaemia in SLE patients. Serum hepcidin was also significantly higher in SLE+a patients than SLE-a, with mean+SD in SLE+a group (9.6±3.5 mg/dl) compared to mean+SD in SLE-a group (5.6±2.8 mg/dl) with P value<0.001.

Conclusions The measurement of serum hepcidin is a useful marker for diagnosis of ACD in patients with SLE and its differentiation from IDA.

Serum hepcidin is both sensitive and specific for detection of anaemia in SLE patients, and is a useful marker for disease activity.