Methods: Twenty – two cases of systemic lupus erythematosus complicated with hemophagocytic syndrome were retrospectively analysed. The clinical manifestations, laboratory tests and prognosis were collected.

Results: Twenty-two patients with systemic lupus erythematosus complicated with hemophagocytic syndrome developed fever in 22 patients, including 18 with hyper-pyrexia, 20 with hyperthermic, 20 with cytopenia, 10 with sphenogalema, 6 with hyperglycemia, 5 cases of hypofibrinogenemia, 14 cases of bone hemophagocytosis occurred in the bone wear, nk cell activity decreased or absent in 7 cases, 15 cases of cyclophosphamide, mostly bilateral amputated lymph nodes and neck bilateral lymph nodes, liver function Abnormalities/hepatic insufficiency in 11 cases, ultrasound showed 10 cases of cardiac involvement, MRI showed 5 cases of cumulative brain. 22 patients were diagnosed with high-dose glucocorticoid, 9 cases of hormonal impact, 17 cases of human immunoglobulin immunosuppression in 9 cases, 4 cases of ganciclovir, 1 cases of acyclovir, 1 case of relying on Park Glycosides. 21 cases improved, 1 case to persuade invalid to abandon treatment and discharge.

Conclusions: SLE and hemophagocytic syndrome have some similarities. The clinical diagnosis is easy to miss. When patients with SLE continue to have high fever, sphenogalema, blood cells decrease, phagocytosis occurs in bone wears, coagulation dysfunction should be combined with vigilance HLH, Improve the relevant inspection. High-dose glucocorticoid combined with immunosuppressive agents, human immunoglobulin therapy can effectively improve the prognosis.

REFERENCE:

AB0576
FEATURES OF NEUROLOGICAL MANIFESTATIONS OF SYSTEMIC LUPUS ERYTHEMATOSUS IN THE KYRGYZ COHORT OF PATIENTS
G. Koliibayev1, E. Aseeva2, S. Solovtsev3, T. Reshetnyak3, 1Rheumatology department, National Center of Cardiology and Internal Medicine named after Academician M. Mirrahimov, Bishkek, Kyrgyzstan; 2Intensive care department; 3Systemic rheumatic diseases, V.A. Nasonova Research Institute of Rheumatology, Moscow, Russian Federation

Background: The development of a variety of neuropsychiatric symptoms in SLE patients starts with the dysregulation of the immune system. Involvement of the CNS in the pathological process during the onset of the disease can significantly worsen the patient’s condition and complicate the prognosis.

Objectives: To study the features of neurological manifestations of SLE in the Kyrgyz cohort of patients.

Methods: The basis of the study were the results of an initial examination of 460 Kyrgyz patients from 460, mainly of the central nervous system (International Classification of Diseases) (ICD-10) was used. Twenty-six cases and literature review. Advances in Macrophage Activation Syndrome (MAS) were included in the analysis.

Results: More than half of our patients had VHD, with regurgitant lesions and valvular thickening being the most common abnormalities. The main abnormal- ities were tricuspid regurgitation (TR) (45.4%), mitral regurgitation (MR) (40.6%) and valvular thickening (19.2%). The majority of cases comprised mild TR (37.2%), mild MR (25.1%) and mitral valve thickening (10.6%). There were more patients with moderate to severe MR compared to TR (15.5% vs 8.2%). Median pulmonary artery systolic pressure was 23.0 mmHg (IQR 13.2). Risk of VHD was 10% in patients with lower C3 levels (<0.83 g/L) (OR 3.36, 95% CI 1.74–6.66). MR (83.3%) and mitral valve (MV) thickening (58.3%) were the most common abnormalities in patients with APS. Having APS greatly increased the risk of MR (OR 8.10, 95% CI 1.65–77.95) and mitral valve thickening (OR 16.30, 95% CI 3.93– 73.84). Risk of mitral valve thickening was increased by presence of lupus anticoagu- lant (OR 20.82, 95% CI 3.64–223.08), anticoagulant antibody (OR 5.24, 95% CI 1.42–17.76), anti-J2GPI antibody (OR 6.35, 95% CI 1.18–37.14) and dia- betes (OR 7.85, 95% CI 1.43–40.24). Risk for MR was increased by presence of lupus anticoagulant (OR 3.55, 95% CI 1.10–12.43). Hypertension was associated with an increased risk for developing aortic regurgitation (OR 4.70, 95% CI 1.67–13.44). Anti-histone antibody positivity appeared to protect against development of VHD (OR 0.46, 95% CI 0.21–0.96).

Conclusions: More than half of our patients had VHD, with regurgitant lesions and valvular thickening being the most common abnormalities. Our finding of the association of MR and mitral valve thickening with APS and individual anti-phospholipid autoantibodies concurs with earlier studies. However, what was unexplained was our finding of the association of VHD with low C3. We suggest that all patients with SLE have at least one echocardiogram, especially the patients with APS or antiphospholipid antibodies.

REFERENCE:

Disclosure of Interest: None declared

AB0578
ANALYSIS OF CLINICAL FEATURES AND RISK FACTORS OF IN-HOSPITAL MORTALITY IN CYTOMEGALOVIRUS (CMV) DISEASES WITH SYSTEMIC LUPUS ERYTHEMATOSUS
H. Ming1, C.-Y. Tsai2, 1Rheumatology/Immunology/Allergy, Taipei Veterans General Hospital; 2Rheumatology/Immunology/Allergy, Taipei Veterans General Hospital, Taipei, Taiwan, Province of China

Background: Cytomegalovirus (CMV) is known as a major cause for life-threat- ening complications in immunocompromised hosts, including status post alloge- neic bone marrow transplantation, solid organ transplantations, and acquired
immunodeficiency syndrome (AIDS). The reactivation of CMV depends on the immune status of host. Systemic lupus Erythematosus (SLE) often requires steroid and immunosuppressive agents to induce remission and lower disease activity. This study presents the clinical presentations, laboratory characteristics, medical profile (including steroid, immunosuppressive agents, and biological agents) and clinical outcomes in SLE patients with diagnosis of CMV diseases. Further, we attempted to investigate the mortality risk factor in these patients.

**Objectives:** To analyse the clinical features, the mortality risk factors and all-cause mortality of Cytomegalovirus (CMV) diseases in patients with systemic lupus erythematosus (SLE). We reviewed the medical records in patients with SLE who were diagnosed with CMV diseases between Jan, 2006 and Dec. 2016 from MIS Veterans General Hospital in Taiwan. Clinical and laboratory parameters as well as treatment outcomes were analysed.

**Results:** Fifty-six patients diagnosed with CMV diseases were enrolled in the study and separated into survivors (n=24) and non-survivors (n=32) groups. All patients in CMV disease demonstrated significantly high incidence of CMV pneumonitis (71.43%). The higher SLEDAA-2000 score (p<0.001, HR:1.154, 95% CI 1.037–1.285), percentage of recent pulse therapy (p=0.013, HR 4.569, 95% CI 1.313–15.902), and plasmapheresis during hospital course (p=0.005, HR 6.905, 95% CI 1.637–29.122) was more common characteristics in non-survivor group than in survivor group. Non-survivors had significantly higher percentage of pan-cytopenia (p=0.001, HR:967.69, 95% CI 2.307–40.511), positive CMV-PCR of blood and bronchoalveolar (BAL) lavage fluid (Blood: p<0.001, HR 15.000, 95% CI 3.932–57.223, BAL fluid: p=0.021, HR 6.176, 95% CI 1.151–33.151), and presence of concurrent infections/bacteremia: p=0.026, HR 4.833, 95% CI 1.122–20.824, other fungal infections; p=0.001, HR 11.424, 95% CI 2.722–47.952) than survivors. Septic shock (n=10, 41.2% of non-survivor group) is the most common cause of in-hospital mortality in CMV diseases.

**Conclusions:** The recent pulse therapy, pan-cytopenia, and concurrent infections are risk factors of in-hospital mortality in CMV diseases of patients with Systemic Lupus Erythematosus. The serological data of non-survivor groups showed negative findings of CMV immunoglobulin M (IgM) with detection of CMV DNA by polymerase chain reaction (PCR) was observed in CMV diseases. The pulmonary haemorrhage and acute respiratory distress syndromes (ARDS) were the factors of in-hospital mortality in CMV pneumonitis.

**REFERENCES:**


Disclosure of Interest: None declared


**AB0579**

**IMMUNOLOGICAL RESULTS OF SALIVARY GLAND BIOPSY AND THEIR RELATIONSHIP WITH CLINICAL AND SEROLOGICAL PARAMETERS IN PRIMARY SJÖGREN’S SYNDROME**

H.S. Park1, L. Martinez Martinez2, B. Magallares3, M. Fernández Castro3, M. A. Martin3, F. Sanchez Alonso3, I. Castelví1, A. Laz1, C. Diaz-Tome1, M. Millan Arciniegas1, P. Moya Alvarado1, L. Lopez Vilaro5, M.C. Hernandez Lafuente2, A. Martin4, F. Sanchez Alonso4, I. Castejón1, A. Lai1, C. Díaz-Torne1, M. Millán1

**Background:** Positive minor salivary gland biopsy (MSGB) is a major criteria for the diagnosis of primary Sjögren’s Syndrome (PSS). In our centre the MSGB analysis is carried out by Immunology and Pathology Department in parallel. The immunological analysis identifies the lymphocytic composition of the inflammatory infiltrate. Their results show: the number of T and B cells, the ratio between CD4 and CD8 T lymphocytes and other non infiltrating lymphocytes.

**Objectives:** The goal of our study was to evaluate whether there is an association between the lymphocytic composition of the MSGB with the clinical and serological findings of PSS patients.

**Methods:** Patients diagnosed of PSS according American-European criteria (2002) underwent MSGB between February and November of 2017. Demographic (sex and age), clinical (disease duration, xerostomia, queratoconjunctivitis sicca, Schirmer test, systemic disease) data were collected. Present or previous treatment with steroids and/or immunosuppressive therapy, serological studies such as ANA, RF, anti Ro and anti La were also included. MSGB data with the number of infiltrates, quantitative composition of T and B lymphocytes, CD4/CD8 ratio and presence of other non infiltrating lymphocytes were registered. Pathology data concerning Chisholm-Mason scale, presence of fibrosis, atrophy and size of infiltrate (small, moderate and severe) were also registered. A multiple logistic regression for each item of the immunological analysis adjusted for sex and age was made. We also measured the odds ratio and performed correlation test for all variables included.

**Results:** Table 1 and 2 summarise our cohort characteristics. The presence of T lymphocyte was associated with B lymphocyte, OR 99.21 (95% CI 1.62–188.13, p<0.018) but inversely associated with Chisholm-Mason grade <3 OR 0.09 (95% CI 0.014–0.58, p=0.011). There was no other association observed with clinical or analytical parameters. Colinearity test between pathological and immunological analysis was negative.

**Abstract AB0579 – Table 1. Immunology, serological and treatment characteristics of patients with PSS**

<table>
<thead>
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<th>Variable</th>
<th>Absolute number (percent)</th>
<th>Proportion %</th>
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<tbody>
<tr>
<td>1</td>
<td>Patient disease</td>
<td>36</td>
<td>26.3%</td>
</tr>
<tr>
<td>2</td>
<td>T lymphocytes</td>
<td>12</td>
<td>11.7%</td>
</tr>
<tr>
<td>3</td>
<td>B lymphocytes</td>
<td>12</td>
<td>48.4%</td>
</tr>
<tr>
<td>4</td>
<td>CD4/CD8 ratio</td>
<td>12</td>
<td>33.3%</td>
</tr>
<tr>
<td>5</td>
<td>Other non-infiltrating lymphocytes</td>
<td>12</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

**Abstract AB0579 – Table 2. Immunological analysis**

<table>
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<th>Variable</th>
<th>Absolute number (percent)</th>
<th>Proportion %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of infiltrates</td>
<td>5</td>
<td>10.0%</td>
</tr>
<tr>
<td>2</td>
<td>Number of T cells</td>
<td>5</td>
<td>10.0%</td>
</tr>
<tr>
<td>3</td>
<td>CD4</td>
<td>7</td>
<td>15.9%</td>
</tr>
<tr>
<td>4</td>
<td>CD8</td>
<td>10</td>
<td>20.8%</td>
</tr>
</tbody>
</table>

**Conclusions:** MSGB in our PSS patients demonstrated an association between T lymphocytes, B lymphocytes and CD4/CD8 ratio. The infiltrate is mostly based on CD4 more than CD8 T cells. Other significant findings were the association between CD8 T lymphocytes and Chisholm-Mason scale grade >3, regardless of the number of infiltrates. No correlation or colinearity was observed with the number of infiltrates by immunological analysis and the Chisholm-Mason grade reported by the pathology analysis.

Disclosure of Interest: None declared