Disclosure of Interests: None declared

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Table 1. Incidence ratios for SLE flares resulting in hospitalization after influenza infection

<table>
<thead>
<tr>
<th>Risk interval</th>
<th>Incidence ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>During risk interval for 7 days / control interval</td>
<td>25.75 (17.63 - 37.59)</td>
</tr>
<tr>
<td>Days 1-3 / control interval</td>
<td>21.81 (14.71 - 32.35)</td>
</tr>
<tr>
<td>Days 4-7 / control interval</td>
<td>7.56 (3.69 - 15.47)</td>
</tr>
</tbody>
</table>

SLE, systemic lupus erythematosus; CI, confidence interval

Disclosure of Interests: None declared

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Table 1. A) Forest plot of univariate analysis; B) Forest plot of multivariate logistic regression; C) Cluster analysis of variables.

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POS0775

CORRELATION OF PERIPHERAL CD4+GRANZB+CTLS WITH DISEASE SEVERITY IN PATIENTS WITH PRIMARY SJÖGREN’S SYNDROME

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Background: Sjögren’s syndrome (SS) is a chronic autoimmune disorder. The major histopathologic lesion of it is a focal lymphocytic infiltrate around ductal and acinar epithelial cells, which include a majority of CD4+ T. Several studies have shown that the epithelial cells in SS present diverse phenomena, such as MHC class II overexpression, CD4+T cells with cytotoxic activity (CD4 CTL) have been detected in various immune responses. They are characterized by their ability to secrete perforin and granzyme B to kill the target cells in an MHC class II-restricted fashion.

Objectives: So this study was to investigate the correlation of peripheral CD4+GranzB+CTls with disease severity and organ involvement in patients with primary Sjögren’s syndrome.

Methods: We recruited 116 pSS patients and 46 healthy controls using flow cytometry to examine proportion of CD4+GranzB+CTls in their peripheral blood, and immunofluorescence to test the expression of CD4+GranzB+CTls in labial gland. The correlations of CD4+GranzB+CTls and the relevant clinical data were analyzed.
Results: We analyzed the percentage of CD4+GranzB+cytotoxic T cells in peripheral blood mononuclear cells (PBMCs) by flow cytometry. Frequency of peripheral CD4+GranzB+CTLs were measured in 116 patients with pSS and 46 healthy controls matched for age and sex. The percentage of CD4+Granz-B+CTLs were significantly up-regulated in pSS patients compared to controls (71.1%±4.9% vs 31.1%±1.9%, p <0.0001) and positive correlation with ESSDAI in pSS patients (r = 0.6332, p<0.001). The percentage of CD4+GranzB+CTLs were markedly higher in pSS patients with extraglandular manifestations. Moreover, CD4+GranzB+CTLs were observed in the lymphocytic foci and peridural areas of the LSGs and were elevated with increased foci index (FI). After excluding the other risk factors associated with pSS, CD4+GranzB+CTLs were still related to ESSDAI and extraglandular manifestations independently (p<0.05). ROC curve analysis indicated that the area under the curve (AUC) of CD4+GranzB+CTLs was 0.796 to predict the activity of pSS, and 0.851 to presume extraglandular manifestations. The best diagnostic cut-off point was 4.865 for pSS patients.

Conclusion: In this study, we provide new evidence indicating involvement of CD4+GranzB+CTLs to over activation in the disease pathophysiology of pSS, which may serve as a new biomarker to evaluate the activity and severity of pSS.

REFERENCES:

Table 1. Multivariate analysis of CD4+GranzB+CTLs influenced by pSS-related factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficient</th>
<th>Standard error</th>
<th>t-statistics</th>
<th>P-value</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESSDAI</td>
<td>0.256</td>
<td>0.122</td>
<td>2.095</td>
<td>0.041</td>
<td>0.011, 0.502</td>
</tr>
<tr>
<td>Manifestations</td>
<td>2.612</td>
<td>1.268</td>
<td>2.059</td>
<td>0.045</td>
<td>0.005, 5.158</td>
</tr>
<tr>
<td>CD8+ GranzB+CTLs (%)</td>
<td>0.144</td>
<td>0.033</td>
<td>4.334</td>
<td>0.615</td>
<td>0.077, 0.211</td>
</tr>
</tbody>
</table>


Figure 1. Receiver operating characteristic (ROC) curve of the frequency of CD4+Granz-B+CTLs to predict ESSDAI and extraglandular manifestations response

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POS0778 ULTRA HIGH-RESOLUTION ULTRASOUND (UHFUS) OF LABIAL GLANDS IS A STRONG PREDICTOR OF SALIVARY GLAND HISTOPATHOLOGY IN SJÖGREN’S SYNDROME (PSS)

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Background: Last-generation ultra high-resolution ultrasonography (UHFUS) transducers, producing frequencies up to 70 MHz and achieving tissue resolution up to 30 μm, are opening up new possibilities for the study of labial salivary glands (LSG) in patients clinically suspected with primary Sjögren’s syndrome (PSS).

Objectives: To explore the value of LSG-UHFUS as a predictor of the intensity of the histological inflammation in LSG biopsy in an inception cohort of patients with sicca symptoms derived from daily clinical practice.