THE DIAGNOSTIC VALUE OF SERUM KL-6 IN CONNECTIVE TISSUE DISEASE ASSOCIATED INTERSTITIAL LUNG DISEASE

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Background: The connective tissue diseases (CTDs) are a group of inflammatory, immune-mediated disorders. Involvement of the respiratory system, particularly interstitial lung disease (ILD), is common and is an important contributor to morbidity and mortality. Currently, high-resolution computed tomography (HRCT), bronchoscopic examination and surgical lung biopsy (SLB) are the basic methods for the diagnosis of ILD. But these tests require specific inspection machines, are less repeatable and cause considerable discomfort to the subject.

Objectives: To evaluate the diagnostic value of serum Krebs von den Lungen-6 (KL-6) for the interstitial lung disease (ILD) associated with connective tissue diseases (CTD).

Methods: Patients with CTDs who visited our Hospital between January, 2016 and December, 2017, and whose serum KL-6 level was measured were included. We analyzed 175 patients with CTDs, 84 CTDs associated ILD, 91 CTDs patients without ILD. Record age, gender, diagnosis, serum KL-6 levels, pulmonary function tests and performed in parallel were reviewed. Statistical analysis was performed using SPSS (version 20.0) statistical package.

Results: The significantly higher levels of KL-6 were determined in the CTD-ILD group than in the CTDs without pulmonary involvement group (P<0.05 (figure 1). By the ROC curves of serum KL-6 levels in 175 patients, the optimal cutoff value of serum KL-6 for a diagnosis of CTD-ILD was 409 U/ml, and the sensitivity and specificity were 82.1% and 86.8%, respectively. The AUC was 0.905 (figure 2).

Table 1: Correlation between KL-6 level and pulmonary function

<table>
<thead>
<tr>
<th>Function</th>
<th>r</th>
<th>P</th>
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<tr>
<td>VC%</td>
<td>-0.196</td>
<td>0.009</td>
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<tr>
<td>FVC%</td>
<td>-0.158</td>
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<tr>
<td>FEV1%</td>
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<td>FEF25%</td>
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<td>FEF50%</td>
<td>-0.058</td>
<td>0.447</td>
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<tr>
<td>FEF75%</td>
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<tr>
<td>MMEF%</td>
<td>-0.075</td>
<td>0.323</td>
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<tr>
<td>DLcoSB</td>
<td>-0.470</td>
<td>0.000</td>
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Conclusion: The serum KL-6 is a valuable biomarker for CTD-ILD diagnosis, and it is an important serum marker for detection of CTD-ILD activity.

REFERENCES

Disclosure of Interests: None declared

ANTI-C1Q ANTIBODIES HAVE HIGHER CORRELATION WITH LUPUS NEPHRITIS DISEASE ACTIVITY

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Background: Systemic lupus erythematosus (SLE) is the prototype of autoimmune disease and is characterized by the production of a variety of autoantibodies and lupus nephritis continues to be a principal cause of morbidity and mortality. The focus is to finding biomarkers that can monitor renal activity and predict prognosis for early diagnosis and treatment. Complement C1q is the starter molecule of the classical pathway.
of complement activation and plays an important role in the clearance of immune complexes and apoptotic cell debris. Hereditary homozygous deficiency of C1q has been described to be the strongest risk factor for developing SLE. There are some cross-sectional studies on anti-C1q in which the antibody was found to have a significant association with renal involvement but the association of anti-C1q antibodies (anti-C1q) with lupus nephritis (LN) still a matter of debate.

Objectives: We assessed the association between lupus nephritis disease activity and anti-C1q antibodies

Methods: We retrospectively analyzed the medical records of 88 patients with lupus nephritis, aged 35.7±10.8 years on the average, with SLE of average duration 12 (3, 57) years. In all examines the levels of anti-dsDNA and anti-C1q antibodies were measured using the ELISA, C3, C4, 24-hour urinary protein performed in parallel were reviewed. The clinical manifestations of SLE was also collected. Lupus nephritis disease activity was measured by The SLICC Renal Activity Score of 2004. All biopsied tissues were scored based on the ISN/RPS2003 lupus nephritis pathological typing standards. Acute Index, Chronic Index Score were used to evaluated the activities of lupus. All the analyses were performed by SPSS 20.0 software.

Results: Patients with active lupus nephritis had a higher levels of anti-C1q antibodies than inactive lupus nephritis (68.9(34.1, 140.1 vs. 11.6(5.5, 44.1); p<0.001) (Figure 1). Anti-C1q antibody levels were positively correlated with levels of 24-hour urinary protein (r=0.605; P=0.000), AI score (r=0.337; P=0.001), and negatively correlated with serum C3 (r=-0.573; P=0.000) and C4 (r=-0.509; P=0.000) (Figure 2).

Conclusion: Anti-C1q antibodies are more closely correlated with renal disease activity.

REFERENCES

Disclosure of Interests: None declared

SAT0674 ADIPOKINES AND ENDOTHELIAL DYSFUNCTION IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Premature atherosclerosis is clearly described in systemic lupus erythematosus as a main cause of poor outcomes and mortality(1). Pleiotropic adipokines including adiponectin and visfatin are implicated in the inflammatory process of lupus disease that promote cytokines signaling leading accelerated endothelial disruption(2)

Objectives: To evaluate the endothelial dysfunction by measuring serum visfatin, adiponectin, leptin and HOMA-insulin Index as reliable biomarkers of atherosclerosis & estimating the FMD of brachial artery among lupus patients and correlating these parameters with clinical characteristics

Methods: A case-control study in which 150 systemic lupus patients who were fulfilling American College of Rheumatology revised classification were recruited consecutively from Internal Medicine department at Cairo University. They were compared to 90 age & sex matched healthy controls. Patients who were pregnant, smoker, diabetic, those with hepatic and...