Background: Pancreatitis is a rare but potentially life-threatening complication of juvenile systemic lupus erythematosus (JSLE).

Objectives: We report 3 children with SLE who presented with acute pancreatitis.

Methods: We have reviewed the clinical records of 140 children with SLE between the period of 1993-2018. Three of them present with acute pancreatitis.

Results: Case 1 - 12-year-girl presented with fever of 1 month and alopecia. Examination revealed pedicale deroendroma, poriform perinessis and generalised pigmented rash. Investigations showed elevated amylase and lipase levels. Clinical possibilities included steroid induced pancreatitis and lupus pancreatitis. Intravenous methylprednisolone was continued following which she showed a dramatic improvement. Case 2 - A 6-year-old presented with pain abdomen and vomiting. Physical examination showed epigastric tenderness. Investigations showed elevated amylase levels. Computerised tomography (CT) abdomen revealed acute necrotising pancreatitis. A ultrasound abdomen revealed a pancreatic pseudocyst. He had a second episode of acute pancreatitis along with anasarca after 3 months. In follow-up he presented with anasarca. Investigation were consistent with lupus. Following the initiation of steroids he improved and there has been no recurrence of pancreatitis over the next 4 years. Case 3 - 9-year-girl presented with generalised rash and lipodermiat. Examination showed pedal oedema, periorbital puffiness, hard palate ulcer and surgical scar on the abdomen. Urinalysis showed nephrotic range proteinuria.

Conclusion: Pancreatitis can at times, be the presentation of childhood lupus and requires prompt and aggressive management.

Disclosure of Interests: None declared.


Vitamin D Cut-off Points Related with Clinical Features in Patients with Active Lupus or Lupus Nephritis

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Background: Vitamin D (25OHD) has immunomodulatory properties that can play a major role in patients with active lupus or lupus nephritis. Its immunomodulatory function could be influenced by demographic factors, comorbidities (Charlson score), bone supplements, and other features.

Objectives: We explored the association between the best 25OHD cut-off points and specific clinical features that were present in patients with active lupus or lupus nephritis.

Methods: A retrospective descriptive research using clinical registers of patients diagnosed with systemic erythematosus lupus, attended in two rheumatology clinics. A decisions tree model was used to identify the best cut-off points of 25OHD [ng/mL] and clinical features associated with active lupus (SLEDAI-2k >6) or lupus nephritis.

Results: We identified 81 patients, median age 41 years, women 91.3%. Active lupus and lupus nephritis were present in 69.1% and 29.6%, respectively. Median 25OHD was 26.49, without a difference at comparing with active lupus patients 24.85, but lower in lupus nephritis patients 21.50 (p: 0.015). Lupus nephritis was absent in patients with 25OHD cut-off points >38.8 (alone) or ≤38.8 if they were older than >57 years. Active lupus was always present in patients ≤44 years with 1. High comorbidity or 2. Low comorbidity plus cut-off point 25OHD >35, in ≤44 years, both a euthyroid state and the absence of bone supplements were present in patients with active lupus.

Conclusion: Exist a strong relationship between vitamin D levels and LES activity.

REFERENCES


Disclosure of Interests: To Fundación Universitaria Juan N. Copas

A COMPARISON OF SHEAR WAVE ELASTOGRAPHIC FINDING OF SUBMANDIBULAR GLANDS IN PATIENTS WITH EARLY-STAGE AND NON-SJÖGREN’S SYNDROME

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Background: Salivary gland (SG) ultrasonography proved valuable for assessing SG involvement in Sjögren’s syndrome (SS) and seemed to exhibit good diagnostic properties. We have reported that the submandibular gland ultrasonography (SGUS) is a useful noninvasive and inexpensive procedure for the evaluation of the structural changes of SG in SS (ISSS 2002, EULAR 2009, EULAR 2012, EULAR 2015). However, our previously study demonstrated that although SGUS findings were useful for the diagnosis of SS with low salivary flow they were not for early stage SS with normal salivary flow (EULAR 2016). Recently, we reported that the tissue elasticity was decreased due to structural changes in the SG at the advanced stage of the disease and that the shear wave
ELASTOGRAPHY (SWE) is useful to distinguish pathological changes of the SG between early stage with normal salivary flow and advanced stage 
EULAR. The present study therefore demonstrated that the tissue elastic-
ity was increased due to inflammation and high viscosity in the SG at 
the early stage of SS with normal salivary flow comparing that in non-SS 
patients, but was decreased due to structural changes in the SG at the 
advanced stage of the disease. The SWE may be a useful tool for eluci-
dation of early stage pathological changes of the SG when salivary gland 
functions are not impaired in SS.

Methods: Seventeen non-SS patients and eighty patients who fulfilled the 
American College of Rheumatology (ACR)/European League Against 
Rheumatism (EULAR) classification criteria for SS were studied. SS 
patients were divided into three groups according to salivary flow using 
gum test (VL/SS: <5 ml/10 min, (n=33), L/SS: 5–10 ml/10 min, (n=92) and 
N/SS: ≥10 ml/10 min, (n=15)). All patients were examined SGUS by 
a single investigator who was blinded to device (TUS-A30; Canon Medical 
Systems, Tokyo, Japan) with a linear transducer (7.5-10 MHz). The exami-
nation consisted of conventional B-mode US (US staging score), pulsed 
wave Doppler US (PD grading score) and SWE with quantitative assess-
ment. US staging scores were assessed by glandular size, inhomogeneity 
and contrast of diaphragm muscle (stage 0 to 3). PD grading scores were 
graded by pulsed wave pattern in pulsed wave Doppler US at the 
internal SG facial arteries (grade 0 to 2). With the region-of-interest (ROI) 
placed over the stiffest areas of the lesion on SWE, the quantitative 
measurement of elastic modulus was performed in the region of interest 
(ROI) and the elasticity values were measured by shear wave velocity (Vs: 
m/s) and elasticity (E: kPa) for each lesion.

Results: The vs and E values were correlated with US staging score (r=0.56, p<0.01, r=-0.58, p<0.01) and PD grading score (r=-0.51, 
p<0.01, r=-0.52, p<0.01) in all patients. There was no significant differ-
ence between non-SS and N/SS in early-stage SS by US staging score 
(0.77±0.90 vs 1.20±0.86) and PD grading score (0.18±0.53 vs 0.52±0.19). 
However, the values of Vs and E were highest in N/SS as compared 
with all groups, and significantly higher in N/SS than in non-SS (Vs: 1.73 
±0.18 vs 2.032±0.28m/s, p<0.01, E: 9.38±1.17 vs 12.73±3.63kPa, p<0.01).

Conclusion: The present study demonstrated that the tissue elasticity 
was increased due to inflammation and high viscosity in the SG at the 
early stage of SS with normal salivary flow comparing that in non-SS 
patients. The SWE may be a useful tool for the differential diagnosis 
between patients with non-SS and early-stage SS with normal salivary 
flow in contrast to conventional SGUS.

Disclosure of Interests: None declared


AB0522

SEASONAL DIFFERENCE IN CEREBRAL STROKE FREQUENCY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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China

Background: The incidence of stroke is well-known as increased in win-
ter season in general population, but seasonal difference in the systemic 
lymph opus erythematosus remain unclear.

Objectives: The aim of study was to assess seasonal difference in cere-
bral stroke among patients with systemic lupus erythematosus.

Methods: We conducted a retrospective case-control study analyzing hos-
pital database of a tertiary referral center in Taiwan. From January, 2002 
to December 2017, subjects with systemic lupus erythematosus and cere-
bral stroke were enrolled. To examine the seasonal incidence of cerebral 
stroke, we analyzed data from the date of CT scan/MRI/MDA. The onset 
time was divided into four seasons (according Local season classifica-
tion): spring (March, April, May), summer (June, July, August), autumn 
(September, October, November), and winter (December, January, 
February).

Results: In total, 4313 systemic lupus erythematosus patients were identi-
fied, 261 patients with cerebral stroke. Age of patients with cerebral 
stroke ranged 27 between 77 years, a mean age was 55-62 years. 
Female was predominant. Disease duration was longer in ischemia stroke 
group (4.8 years). According CT or MRI results, divided 4 types (ische-
ia stroke (IS), ICH, SAH, SDH), 83% (150/180) cerebral stroke was 
ischemia stroke. 8.3% ICH, 5.5% SAH, 2.8% SDH found respectively. 
We noted a higher incidence of SLE with ischemia stroke in summer sea-
son (38.7%), the lowest incidence of ischemia stroke in winter season 
(18.7%). Patient with ICH has similar trend. But not found in SAH and 
SDH.

Conclusion: Incidence of systemic lupus erythematosus with cerebral 
stroke varied in different pattern. The present findings suggested an 
increase in the incidence of Ischemic stroke and ICH in summer season. 
Awareness of risk factors (esp. antiphospholipid antibodies) was essential 
to prevent cerebral stroke in SLE.

Table Seasonal difference in different types of cerebral stroke

<table>
<thead>
<tr>
<th>Age</th>
<th>IS (n=150)</th>
<th>ICH (n=15)</th>
<th>SAH (n=10)</th>
<th>SDH (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>59.0</td>
<td>60.5</td>
<td>55.0</td>
<td></td>
</tr>
<tr>
<td>Gender (F:M)</td>
<td>46.8:75.0</td>
<td>35.0:68.0</td>
<td>43.3:77.3</td>
<td>27.0:71.0</td>
</tr>
<tr>
<td>Disease duration</td>
<td>73.3±26.7</td>
<td>66.7±33.3</td>
<td>90.0±10.0</td>
<td>60.0±40.0</td>
</tr>
<tr>
<td>Season</td>
<td>Spring (3-5)</td>
<td>21.3% 26.7%</td>
<td>20.0% 60.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Summer (6-8)</td>
<td>38.7% 53.3%</td>
<td>20.0% 20%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Autumn (9-11)</td>
<td>21.3% 6.7%</td>
<td>30.0% 20%</td>
<td></td>
</tr>
<tr>
<td>Winter (12-2)</td>
<td>18.7% 13.3%</td>
<td>30.0% 0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>