Objectives: Determine prevalence of MIN in SLE (LLC). Compare clinical and echocardiographic (echo) features of patients with and without MIN.

Methods: A prospective crosssectional study was done at Tygerberg Hospital, Western Cape, South Africa. Adult inpatients, fulfilling the 2012 SLICC criteria were screened. Echo analyses included STE and regional function (wall motion score (WMS)). Patients were grouped according to evidence of MIN (absent criteria [AC]; single criterion [SAC]; fulfilling LLC), comparing clinical, laboratory and echo data. Logistic regression and ROC were used to determine predictors of MIN.

Results: 49/106 SLE patients screened were included (Figure 1). 46.9% of patients had MIN (≥1 criterion): 12.2% fulfilled LLC for LM and 34.7% had a SAC. SLE disease activity (SLEDAI) (p=0.022) was higher in patients fulfilling LLC, in 17.6% of patients in the SAC group and none in the AC group (Table 1). Anti-DsDNA and anti-B2GPI were more frequently positive in SAC vs the AC group (p=0.054 and 0.081). WMS was higher in LLC and SAC groups (p=0.006;p=0.083) with mid and basal STE more impaired in patients with MIN (p=0.047;p=0.043), LVID and mid STE score combined was the best predictor of MIN (Figure 2).

Conclusion: CMR evidence of MIN is common in SLE, even in the absence of clinical myocardial dysfunction or high lupus activity. Impaired echo regional and global function occurs more frequently in patients with MIN. STE combined with LVID predicts MIN detected by CMR and has potential as a cost effective screening tool. CMR is limited by a high exclusion rate in SLE, mainly due to renal impairment.

REFERENCES:

Table 1

<table>
<thead>
<tr>
<th></th>
<th>AC n=26</th>
<th>LLC n=6</th>
<th>SAC n=17</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>27 (21-35)</td>
<td>27 (23-28)</td>
<td>1</td>
<td>29 (23-36)</td>
</tr>
<tr>
<td>SLE duration, days</td>
<td>114 (6-136)</td>
<td>35 (31-44)</td>
<td>0.724</td>
<td>955 (7-2101)</td>
</tr>
<tr>
<td>SLEDAI</td>
<td>13 (9-15)</td>
<td>22 (16-26)</td>
<td>0.022</td>
<td>12 (9-20)</td>
</tr>
<tr>
<td>Antiphospholipid syndrome</td>
<td>2 (8)</td>
<td>0</td>
<td>0.483</td>
<td>4 (24)</td>
</tr>
</tbody>
</table>

Table 2

<table>
<thead>
<tr>
<th>Logistic regression</th>
<th>Univariate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Echo variable</td>
<td>OR 95% CI</td>
</tr>
<tr>
<td>LVID</td>
<td>2.6</td>
</tr>
<tr>
<td>LV ejection fraction</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Disclosure of Interests: Riette du Toit Grant/research support from: I received a sponsorship to attend EULAR 2018 from Pfizer.

Figure 2

IN PATIENTS WITH UCTD, IFN ACTIVITY IDENTIFIES PATIENTS THAT PROGRESS TO DEFINITIVE CTD CLASSIFICATION CRITERIA


Background: Undifferentiated connective tissue disease (UCTD) is a term used to describe individuals with positive autoantibodies and symptoms but do not meet criteria for an established autoimmune CTD (AI-CTD). The prognosis of UCTD is unclear, could result in disease stability, remission or progression. As this condition is understood, there is an unmet need for biomarkers to stratify those who progress to allow for a more aggressive therapy to be employed. IFN plays a major role in the pathogenesis of various AI-CTDs. However there are limited data on its role in AI-CTD.

Objectives: To determine whether IFN assays can predict progression from UCTD to meeting classification criteria of established AI-CTDs.

Methods: A prospective observational study was conducted on 43 consecutive patients with UCTD; as defined by Mosca criteria [1]. Progression was defined by meeting 2012 ACR/SLICC SLE, 2016 ACR/EULAR Primary Sjogren’s, Bohan-Peter, 2013 ACR/EULAR Scleroderma, or 2006 Sydney Antiphospholipid syndrome criteria. For the interferon scores, RNA was extracted from PBMCs and a custom Taqman array was used to measure expression of 30 interferon stimulated genes (ISGs) as previously described [2]. A two-score system of ISGs (IFN-Score-A and Score-B), was calculated without the knowledge of participants’ clinical status.

Results: Mean (range) age of the cohort was 48 (39-58) years; Female 36 (84%); mean disease duration 5.5 years; concomitant DMARDS including anti-malarials 38 (88%), concomitant corticosteroid 2(5%) and internal organ involvement 9 (21%). At the follow-up visit, 9/43 (21%) met established classification criteria for AI-CTD [SLE=6; IIM=2; and SSc=1]. Compared with the non-progressors, there was a trend to association for higher expression in the progressor group vs remained undifferentiated (n=34); the IFN-Score-A was higher in the progressor group; fold difference (FD) 2.76 (95% CI 1.11-6.88); p=0.030. While for IFN-Score-B, there was a trend to association for higher expression in the progressor group vs remained undifferentiated; FD 1.74 (0.53-3.21); p>0.077.

Conclusion: IFN assays can identify progression to classifiable CTD within cohorts of UCTD. There is a potential role for the use of IFN biomarkers in the prognostication of patients with UCTD.
REFERENCES:

Acknowledgement: We acknowledge no conflicts of interest

Disclosure of Interests: Katherine Dutton Speakers bureau: Pfizer, Md
Disclosure of Interests: We acknowledge no conflicts of interest

REFERENCES:

Disclosure of Interests: Elena Elefante: None declared, Chiara Tani: None declared, Francesco Ferro: None declared, Chiara Stagnaro: None declared, Alice Parma: None declared, Viola Signorini: None declared, Marta Mosca Paid instructor for: GlaxoSmithK

Lilly, UCB


FR0232 PATIENT PERCEPTION OF SLE BURDEN: THE ROLE OF ORGAN DAMAGE

Elena Elefante1,2, Chiara Tani1, Francesco Ferro1, Chiara Stagnaro1, Marta Mosca1, Marica Rolfo1, University of Pisa, Rheumatology Unit, Department of Clinical and Experimental Medicine, Pisa, Italy; 2University of Siena, Department of Medical Biotechnology, Siena, Italy; 3AOO Pisansa, Rheumatology Unit, Pisa, Italy

Background: physician-based assessment of Systemic Lupus Erythematosus (SLE) may not be able to capture the real disease impact on patients’ life. In the literature, the impact of disease damage on patients’ quality of life (QoL) is controversial.

Objectives: Objective of our study was to investigate the role of organ damage in determining patient perception of SLE burden.

Methods: this is a cross-sectional study that enrolls patients with a diagnosis of SLE (ACR 1997 criteria). For each patient, demographics, comorbidities, treatment, clinical and laboratory data were collected. Disease damage was evaluated with the SLICC-Damage Index (SDI) and a score >2 was defined as “severe damage”. The BILD (Brief Index of Lupus Damage) was used for patient self-evaluation of organ damage. Finally, the Lupus Impact Tracker (LIT) questionnaire was used to assess patient perception of SLE burden.

Results: we included 246 adult SLE patients (94.7% Caucasian, 93.1% female, mean age 45.3±13.2 years, mean disease duration 14.3±9.8 years). As for cumulative organ involvement in our cohort, the most prevalent was articular involvement (67.5%), followed by cutaneous (54.1%), hematological (51.2%), renal (43.9%) and serositis (17.9%); 11.8% had a history of NPSLE. Among comorbidities, 10.9% of patients had a concomitant fibromyalgia. 48.8% of patients was presenting at least one history of NPSLE. Among comorbidities, 10.9% of patients had a concomitant fibromyalgia. 48.8% of patients was presenting at least one history of NPSLE. Among comorbidities, 10.9% of patients had a concomitant fibromyalgia.

Conversely, SDI score was not related with health-related quality of life and fatigue as measured by SF-36 and FACIT respectively, neither with fibromyalgia.

Conclusion: disease damage seems to have a role in determining patient perception of SLE burden, mainly affecting patients’ ability to plan the future and to fulfill daily activities and family responsibilities. In particular, neuropsychiatric damage exerts the greatest influence on patient perception of SLE impact.

REFERENCES:

Disclosure of Interests: Pia Elving Speakers bureau: Mylan Finland Oy, ABBvie Oy, UCB Pharma Oy Finland, Hannu Kautainen: None declared, Laura Virta: None declared, Olli Kaipiainen-Seppänen: None declared, Kari Puolakka: None declared, Kuopio University Hospital, Department of Medicine, Kuopio, Finland.

Helsinki University Central Hospital, Unit of Primary Health Care, Helsinki, Finland. University of Helsinki, Department of General Practice, Helsinki, Finland. Kuopio University hospital, Unit of Primary Health Care, Kuopio, Finland. Social Insurance Institution, Research Department, Turku, Finland. Kuopio University Hospital, Department of Medicine, Kuopio, Finland. South Karelia Central Hospital, Department of Medicine, Lappeenranta, Finland

Background: it is well established from a variety of studies that systemic lupus erythematosus (SLE) patients have a shortened life expectancy. The literature on SLE has highlighted the impact of cardiovascular diseases (CVD) on increased mortality. However, there is lack of studies comparing results to the background population.

Objectives: Aim of the study was to clarify, whether incident SLE patients have an excess mortality compared to population controls.

Methods: The study included all adult (age ≥ 17 years), incident SLE patients who were entitled to a special reimbursement for SLE medication in years 2000 – 2014 in Finland. For each patient, the Population Register Centre identified 3 population controls matched for age, sex and place of residence. Comorbidities at baseline were obtained from the Care Register for Health Care of the National Institute for Health and Welfare. Data on education at baseline and deaths until the end of 2015 were retrieved from the Statistics Finland.

Results: A total of 1066 incident SLE patients (84% females) and 3005 population controls were found. During the follow-up (mean 8.6 years), 98 patients (mean age at death 70±14 years, 65% females) died. The 5-, 10-, and 15-year survival rates in SLE patients were 95.0% (95%CI 93.3-96.2%), 88.8% (86.2-91.0%) and 82.1% (77.6-85.8%), respectively. The number of deaths among SLE patients was 187, Crude hazard ratio (HR) was 1.61 (95% CI: 1.26 to 2.06), p<0.001, adjusted for education and comorbidities 1.14 (95% CI: 0.88 to 1.48) p=0.32. Main causes of deaths in patients were CVDs (33%), malignancies (27%) and neurological diseases (10%). Ten-year cumulative mortality rate due to CVD was in SLE patients 3.3% (95%CI 2.2 to 4.9%) and in controls 2.6% (2.0-3.3) and 15-year rate 6.7% (95%CI 4.2 to 9.9) and 4.9% (3.6 to 12.0), respectively. Crude HR for CVD deaths was 1.28 (95% CI: 0.85 to 1.93), p=0.24, adjusted 0.88 (95% CI: 0.56 to 1.39), p=0.58.

Conclusion: SLE patients had a slightly increased risk for overall and cardiovascular related mortality compared to population controls. After adjusting for education and comorbidities, the difference was not statistically significant.

REFERENCES:

Disclosure of Interests: Pia Elving Speakers bureau: Mylan Finland Oy,ure Oy, UCB Pharma Oy Finland, Hannu Kautainen: None declared, Laura Virta: None declared, Olli Kaipiainen-Seppänen: None declared, Kari Puolakka: None declared