IS USE OF HYDROXYCHLOROQUINE ASSOCIATED WITH BETTER PATIENT REPORTED OUTCOMES IN LUPUS?

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Background Use of Hydroxychloroquine (HCQ) is known to be associated with less disease activity, flares, damage and better survival in patients with Systemic Lupus Erythematosus (SLE). It is not known if its use is also associated with better patient reported health outcomes, a core outcome in SLE.

Methods International data from Study on Outcomes of Lupus (SOLU) on LupusPRO, a patient reported disease targeted Questionnaire in clinical routine. To be highlighted is that the SOLU considers subjective health parameters, like Qol which might be relevant for disease treatment. Further results will be presented at the conference.

Abstract P173 Table 1 Mediation of effects of HCQ use with outcomes through disease activity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Univariate</th>
<th>Multivariate</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>95% CI</td>
</tr>
<tr>
<td>Activity (SLEDAI)</td>
<td>2.04</td>
<td>0.90, 3.18</td>
</tr>
<tr>
<td>HCQ</td>
<td>-3.050</td>
<td>-7.93, 1.84</td>
</tr>
<tr>
<td>LupusPRO-HRQOL</td>
<td>6.190</td>
<td>4.15, 8.24</td>
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</tbody>
</table>

Results It was possible to include 72 SLE patients with 305 visits in the study. 64 (88%) of them were female and 8 patients were male. Average age was 48 (SD ± 13.1) and the median duration of lupus disease was 15.6 years (SD ± 8.7). There was a significant correlation between MLS and ECLAM (p<0.001), WA1 (p = 0.027) and BDI (p = 0.003), whereas the SLEDAI and cSLEDAI just show correlation with BDI (p = 0.008), respectively (p = 0.042). Additionally, a correlation between MLS and the remission status was found (p<0.001).

Conclusions The MLS is a 10 minute easy to administer questionnaire in clinical routine. To be highlighted is that the MLS considers subjective health parameters, like Qol which might be relevant for disease treatment. Further results will be presented at the conference.

P174 EXTENDED ARTERIAL ULTRASOUND REVEALING INCREASED INTIMA MEDIA THICKNESS AND RELATION TO IMPAIRED MICROCIRCULATION IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background Systemic lupus erythematosus (SLE) is a chronic inflammatory disease characterized by multiple organ involvement. Atherosclerosis is the underlying cause of SLE-related cardiovascular disease. With high frequency ultrasound it is possible to differ between atherosclerosis and inflammatory findings in the vessel wall. Our hypothesis is that both macro- and microcirculation are impaired in SLE.

Methods Sixty patients (52 women, 8 men), range 23–63 years, classified with SLE according to the 2012 SLICC criteria, and 60 healthy controls (52 women, 8 men), range 23–63 years, were investigated. Intima-media thickness (IMT) was recorded with high frequency ultrasound (GE Logic E9) in common carotid artery (CCA), common femoral arteries (CFA) and the aortic arch. Microcirculatory oxygen saturation was assessed with EPOS (Enhanced Perfusion and Oxygen Saturation) (PeriFlux 6000, Perimed, Järfälla, Sweden). The EPOS system measures red blood cell tissue fraction, speed resolved perfusion and oxygen saturation in the microcirculation of the skin.

Results IMT in common carotid artery (CCA) was 0.56±0.10 mm in SLE patients vs 0.54±0.13 mm in healthy controls (ns). IMT in common femoral artery (CFA) was 0.58±0.24 mm in SLE patients vs 0.48±0.12 mm in healthy controls (p<0.001). Other predictors for QOL and LIT were age, education, Asian race and disease activity. On multivariate analyses (adjusted for age, education, Asian status) use of HCQ was independently associated with better outcomes (LupusPRO-HRQOL and LIT). However, addition of disease activity variable to the models resulted in loss of independent association of HCQ use with better outcomes, suggesting mediation through disease activity (table 1). Similarly, mediation was seen for beneficial effects of HCQ use on damage through disease activity.

Conclusions HCQ use in SLE is associated with better health outcomes (LupusPRO-HRQOL, impact on daily life, damage), and the effects are mediated through disease activity modification.

Acknowledgements Behalf of SOUL group.
(p<0.0001). IMT in the aortic arch was 1.21±0.63 mm in SLE patients vs 0.98±0.25 mm in healthy controls (p=0.002). Areas of increased IMT showed regular wall thickening of medium echogenicity indicating possible inflammatory origin. Microcirculation as measured with mean oxygen saturation peak was decreased in SLE patients versus controls, 83.7±7.8% vs 86.7±4.6% (p=0.01).

Conclusion This study indicates that an extended ultrasound protocol to detect possible inflammatory vessel wall changes and/or early atherosclerosis in SLE is of value. In addition we showed impaired microcirculatory function as measured with EPOS in SLE patients. Further validation of macro and microcirculatory lesions are warranted in larger studies.

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**A CASE OF LUPUS ENTERITIS SUCCESSFULLY TREATED WITH ANTI-TNF ALPHA INHIBITOR**

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Background Gastro-intestinal manifestations in systemic lupus erythematosus (SLE) can affect up to 40% of patients, including enteritis presenting as mesenteric vasculitis, pseudo-obstruction or protein-losing enteropathy. We present a case of lupus enteritis successfully treated with anti-TNFalpha inhibitor.

Methods A 28-year-old woman was evaluated for diarrhea, abdominal pain, fever and rectal bleeding not responsive to antibiotics. She had a thirteen-year history of SLE in remission with Mycophenolate Mofetil and previous mucocutaneous and haematologic relapses, myocariditis and end-stage renal disease (IV-class glomerulonephritis). She previously underwent multiple immunosuppressants including ciclophosphamide, cyclosporine, anti-CD20, immunoglobulins. One month before the onset of symptoms she discontinued MMF for worsening anemia. Simultaneously we reported signs of lupar flare (low C3, haemolytic anemia, lymphopenia, fever, arthralgias and malar rash). Pulse-steroids and IVIg followed by cyclosporine were initially performed with only temporary benefit. Enteric CT-scan and endoscopy revealed chronic and acute colo-recital and gastric inflammation (cryptitis, erosions, necrosis, microgranulomas). Anti-TNFalpha inhibitor Infliximab (5 mg/kg) was added to Azathioprine 50 mg/daily. Within a month we observed clinical and serological sustained remission.

Results Typically, mesenteric vasculitis involves small arteries or venules. Histological examination reveals submucosal and muscular layers infiltration and necrotizing vasculitis, with panmural predominant eosinophilic, neutrophilic or mixed infiltrate. The distinction of inflammatory bowel disease (IBD) from enteric-SLE can be challenging. In this case, an early anti-flogistic therapy may have led to uncomplete microscopic patterns not fullfilling criteria neither for enteric vasculitis nor IBD. A lupic flare with predominant gastro-enteric presentation is the most plausible hypothesis because of the infrequent association between SLE and IBD and simultaneous extra-intestinal lupic features. Abdominal involvement in a patient previously treated with high dosage ciclophosphamide (10 g) and the lack of response to azathioprine lead to the introduction of anti-TNFalpha inhibitor.

Conclusion The role of TNFalpha in SLE is controversial and TNFalpha inhibitors are reported to control SLE-arthritis. Further studies are needed to evaluate their role in the management of gastro-enteric SLE.