Background: Lupus nephritis (LN) remaining as one of the most devastating manifestations of systemic lupus erythematosus (SLE). Only 60% of patients with LN achieve a complete (CR) or partial remission (PR) with mycophenolate mofetil (MMF) or intravenous (iv) cyclophosphamide (CY) plus corticosteroids. Of those nearly one-half will have a relapse following maintenance therapy [1]. Rituximab (RTX) is considered a treatment of relapsing LN [2]. Although potential benefits have been revealed in descriptive studies, efficacy has not been established in randomized trials [3,4].

Objectives: This study compares the efficacy achieving a CR or PR with MMF+RTX versus iv CY+RTX in patients with relapsing LN.

Methods: Mexican SLE patients classified by SLICC 2012 criteria were recruited from 2013 to 2019 with LN diagnosed by renal biopsy who previously achieved a CR with MMF or iv CY followed by the maintenance therapy with azathioprine (AZA) or MMF and subsequently present relapsing LN consisting of a new active urinary sediment (US), worsening proteinuria and renal function. Demographic, renal clinical and paraclinical variables were examined. All patients received oral prednisone (1 mg/kg/d) accompanying MMF 3 g/d or CY 0.5–1 g/m² monthly plus RTX 1 g at 0 and 14 days. The data were evaluated at 0, 6, 12 and 24 month(s) after the start both treatments. CR was defined as normal serum creatinine (SCr), inactive US, plus 24-Hour Urine Protein (24hUP) <500 mg/dl and PC was established as 50 percent improvement in renal parameters. Fisher’s exact and Student t-tests were performed by univariate analysis.

Results: Of nine SLE patients with relapsing LN, seven were women. The mean age (standard deviation (SD)) was 25.1 (6.4) years. The mean time at the onset of SLE (SD) was 3.44 (1.12) years ago. Four and five patients had class IV and IV/V LN respectively. Time of relapsing LN after CR (SD) was 2.12 (7.17) months. Seven patients used CY followed by AZA and two employed MMF previously of relapsing LN. The mean of basal SLDAI and SLICC (SD) were 19.11 (3.2) and 1.22 (0.44) respectively. The mean of basal 24hUP (SD) was 4.67 (2.6) g/d and Scr (SD) was 2.0 (0.84) mg/dl. Five patients used MMF+RTX and four patients utilized CY+RTX. No statistically significant differences were found for CR, PR, 24hUP, scr, US, anti-dsDNA and complement between both groups. At 6 months one patient achieved a CR and six reached a PR. At 12 months four patients fulfilled a CR and seven had a PR. Finally, at 24 months seven patients showed a CR and a PR. Only two patients did not achieve a CR or PR at 24 months, although were no found differences between both treatments. However, these observations must be confirmed in larger and prospective studies.

REFERENCES:

Disclosure of Interests: None declared

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AB0287 EFFECTS OF HYDROXYCHLOROQUINE ON PERIPHERAL BLOOD CYTOKINE EXPRESSION ASSOCIATED WITH Atherosclerosis in Systemic Lupus Erythematosus

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Background: In systemic lupus erythematosus (SLE), a higher frequency of atherosclerotic lesions is associated with a poor life prognosis (1). Hydroxychloroquine (HQC) has been reported to improve the prognosis of life and dyslipidemia in SLE (2), and the mechanism has been unclear.

Objectives: To determine the effect of HQC treatment on serum cytokines associated with atherosclerosis in SLE.

Methods: SLE patients who received additional HQC and maintained low disease activity between January 2016 and September 2020 were included in this study. Disease activity was assessed by SLEDAI, CLASI and LLADS, and serum complement factors, anti-dsDNA antibodies, serum insulin and serum cytokines (adiponectin, resistin and leptin) were analyzed before and after HQC treatment.

Results: Fifty-four patients (3 males, 51 females, mean age 41.9±12.8 years) were included (Table 1). Thirty-two patients achieved LLADS at baseline. Serum adiponectin and insulin levels were significantly increased after 3 months of HQC treatment compared to baseline, and serum resistin levels were significantly lower (Figure 1). Patients with a history of renal disease had greater degree of changes in serum adiponectin and resistin levels. Among SLE patients who did not achieve LLADS at baseline, those who still did not achieve LLADS after 3 months had significantly lower serum leptin levels before HQC treatment than those who achieved it after 3 months. The change of serum resistin levels correlated with those of serum S100A8 levels (r=0.5, p=0.0001).

Conclusion: Additional HQC treatment in SLE patients improves lipid abnormalities. HQC may improve prognosis by controlling disease activity in SLE and reducing risk factors for atherosclerosis.

REFERENCES:
Table 1. Characteristics of SLE patients enrolled in this study

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>BEL</th>
<th>PBO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female, no(%)</td>
<td>51(64)</td>
<td>49(61)</td>
<td>99(62)</td>
</tr>
<tr>
<td>Age, years, mean±SD</td>
<td>41.9±12.9</td>
<td>41.6±12.8</td>
<td>41.8±12.8</td>
</tr>
<tr>
<td>Disease duration, years, mean±SD</td>
<td>15.1±11.1</td>
<td>15.2±11.2</td>
<td>15.2±11.1</td>
</tr>
<tr>
<td>Past involvement</td>
<td>23(43)</td>
<td>20(40)</td>
<td>22(40)</td>
</tr>
<tr>
<td>Renal involvement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSPSE</td>
<td>5(9)</td>
<td>7(12)</td>
<td>6(10)</td>
</tr>
<tr>
<td>Complication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APS</td>
<td>10 (19)</td>
<td></td>
<td>10 (19)</td>
</tr>
<tr>
<td>Prednisone</td>
<td>1 (2)</td>
<td></td>
<td>1 (2)</td>
</tr>
<tr>
<td>Concomitant immunosuppressive treatments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low complement, no(%)</td>
<td>26 (45)</td>
<td>28 (54)</td>
<td>27 (46)</td>
</tr>
</tbody>
</table>

Anti-dsDNA positive means anti ds-DNA titer increases over 12 IU/mL. Low complement means any of C3, C4 and CH50 decreases to less 68mg/dl, less 12mg/dl, 30U/ml.

APS: Anti-PLP antibody, no(%) 29 (54)
SLENA-SLEDAI score 3.9±2.0

Disease activity

Dyslipidemia 2 (4)
Disease duration, years, mean±SD 15.1±11.1
Age, years, mean±SD 41.9±12.8
Female, no(%) 51(94)
Diabetes 1 (2)
Dyslipidemia 2 (4)
Disease duration, years, mean±SD 15.1±11.1
Age, years, mean±SD 41.9±12.8
Female, no(%) 51(94)
Diabetes 1 (2)

Table 1. Year 2 post-treatment follow-up mortality and new primary malignancy rates by study treatment during Year 1

<table>
<thead>
<tr>
<th>Year 1 as-treated population</th>
<th>BEL</th>
<th>PBO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>N=2002</td>
<td>N=2001</td>
<td>N=4003</td>
</tr>
</tbody>
</table>

Year 1 deaths, n (%) 13 (0.65) 22 (1.10) 35 (0.87)
Year 1 new primary malignancies, n (%) 9 (0.45) 10 (0.50) 19 (0.47)
Year 2 (as-treated in Year 1) population N=1851 N=1666 N=3517
Year 2 deaths by MedDRA SOC, n (%) 9 (0.54) 21 (1.26) 30 (0.90)
Cardiac disorders 2 (0.12) 6 (0.36) 8 (0.24)
Infections and infestations 4 (0.24) 2 (0.12) 6 (0.18)
Uncoded 1 (0.06) 3 (0.18) 4 (0.12)
General disorders/administration site conditions 1 (0.06) 2 (0.12) 3 (0.09)
Gastrointestinal disorders 1 (0.06) 1 (0.06) 2 (0.06)
Neoplasms 0 2 (0.12) 2 (0.06)
Other 0 5 (0.30) 5 (0.15)
Cumulative deaths by Year 2 follow-up, n (%) 22 (1.10) 43 (2.15) 65 (1.62)
Incidence rate per 100 patient years 0.60 1.18 0.89
Year 2 new primary malignancies by MedDRA SOC, n (%) 3 (0.18) 4 (0.24) 7 (0.21)
Neoplasms 2 (0.12) 4 (0.24) 6 (0.18)
Hepatobiliary disorders 1 (0.06) 0 1 (0.03)
Cumulative malignancies by Year 2 follow-up, n (%) 12 (0.60) 14 (0.70) 26 (0.65)
Patient incidence rate per 100 patient years 0.34 0.40 0.37

Disclosure of Interests: None declared DOI: 10.1136/annrheumdis-2021-eular.2362

AB0288

SAFETY OF BELIMUMAB IN PATIENTS WITH ACTIVE SYSTEMIC LUPUS ERYTHEMATOSUS: YEAR 2 FOLLOW-UP OF A LARGE PHASE 4, RANDOMISED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY

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Background: Belimumab (BEL), a recombinant human monoclonal antibody that inhibits B-lymphocyte stimulator (BlyS), is approved for the treatment of systemic lupus erythematosus (SLE). Clinical studies have shown varying incidence rates of mortality and adverse events of special interest, such as malignancies, thereby necessitating large-scale, long-term assessment following BEL exposure.

Objectives: To assess all-cause mortality and new primary malignancies during post-treatment Year 2 follow-up in adult patients with active, autoantibody-positive SLE who received intravenous (IV) BEL or placebo (PBO), plus standard therapy in the 52-week double-blind treatment period of the ongoing BASE trial.

Methods: This was a post-treatment follow-up of the Phase 4, double-blind study (BASE1; GSK Study BEL115467; NCT01705977), which randomised 4019 adults with active SLE and receiving standard therapy to BEL (10mg/kg IV) or PBO on Days 0, 14, 28, and monthly thereafter until Week 48. All patients (including those who discontinued BEL before the end-of-treatment phase) were contacted by phone annually (+/−30-day time window). Rates of mortality and new primary malignancy are summarised for Year 2 follow-up, presented by the treatment received during the 52-week double-blind treatment period (Year 1).

Results: Baseline patient characteristics and disease activity collected at the start of the study, evaluated in patients with Year 2 follow-up were similar to the overall Year 1 study population. Cumulative by Year 2 follow-up, 10.7% and 9.5% of patients had been exposed to commercial BEL in the BEL and PBO groups, respectively. Cumulative follow-up adjusted mortality and malignancy rates (per 100 patient years) were lower in the BEL vs PBO Year 1 treatment group (Table 1).

Conclusion: Year 2 follow-up results of BASE, the largest clinical trial of SLE to date, provide continued support for the BEL safety profile. No new BEL safety concerns were identified in patients with active, autoantibody-positive SLE receiving standard therapy.

Funding: GSK

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Disclosures of Interests: None declared DOI: 10.1136/annrheumdis-2021-eular.2362