LUPUS LOW DISEASE ACTIVITY STATE AND MAINTAINING DISEASE THERAPY: A RETROSPECTIVE INVESTIGATION

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Background: Systemic lupus erythematosus (SLE) is a chronic autoimmune multisystemic disease, that can begin with a wide range of clinical manifestations, and requires immunosuppressive therapies (1). A treat-to-target strategy has been provided in the last years and Lupus Low Disease Activity State (LLDAS) (SLEDAI-2K < 4 and no activity in major organ systems, no new features, no new active features compared to previous assessment, and 90% global assessment (PGA) ≤ 1, prednisone dose ≤ 7.5 mg/day, well tolerated and stable therapy with maintenance doses of immunosuppressive drugs). Clinical and serological manifestations, SLEDAI-2K and pharmaceutical treatments were recorded at baseline and during follow-up.

Results: Mucocutaneous involvement (57%), arthritis (30%), serositis (30%), nephritis (27%), leucopenia (23%), thrombocytopenia (20%), hemolytic anemia (13%), antiphospholipid syndrome manifestations (16%), neuro-psychiatric lupus symptoms (6%) were present in various combinations at disease onset. Baseline mean SLEDAI-2K was 10.5±2.5. Patients were treated with different dosages of glucocorticoids (100%), hydroxychloroquine (HQC, 73%), cyclofosfamide (20%), mycophenolate mofetil (MMF, 13%), azathioprine (AZA, 13%), methotrexate (MTX, 13%), cyclosporine A (CSA, 6%), rituximab (3%), abatacept (ABA, 3%), Glucocorticoids were prescribed together with a single DMARD in 50% of cases and with two DMARDs in the remaining 50% of patients. Patients reached LLDAS remission after a mean time of 14±2 years, with a mean remission duration of 4.2±3.2 years (mean SLEDAI-2K at last visit 1.1; mean PGA 0.4±0.1). Maintenance therapies during remission were prednisone ≤ 5 mg/day and/or HQC ≤ 400 mg/day and/or CSA ≤ 200 mg/day and/or MTX ≤ 10 mg/week and/or MMF ≤ 2 g/day and/or AZA ≤ 100 mg/day. In particular, only prednisone 7%, only HQC 3%, prednisone + HCO 53%, prednisone + single DMARD (different from HQC) 7%, prednisone + HQC + DMARD 29%.

Conclusion: After reaching the clinical remission by a treat to target strategy, the administration of low dose of prednisone and HQC in the majority of SLE patients (63%) seems useful to prevent new SLE flares. The retrospective design and the absence of a control group of patients with active disease limit this study.

References:

Scientific Abstracts

<table>
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<tr>
<th>Age (years), median (IQR)</th>
<th>Hypertension, n (%)</th>
<th>Preconception counselling, n (%)</th>
<th>SLE disease &amp; therapy characteristics</th>
<th>SLEDAI-2K, median (IQR)</th>
<th>Anti-dsDNA, n (%)</th>
<th>Anti-SSA/Ro and/or anti-SSB/La, n (%)</th>
<th>Azathioprine, n (%)</th>
<th>Low dose Aspirin, n (%)</th>
<th>Obstetrical history</th>
<th>Previous fetal loss, n (%)</th>
<th>Previous (pre-eclampsia or HELLP), n (%)</th>
<th>Previous congenital heart block, n (%)</th>
<th>Pregnancy outcome</th>
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</thead>
<tbody>
<tr>
<td>31.0 (28.0-34.0)</td>
<td>29 (15.8%)</td>
<td>122 (66.3%)</td>
<td>Lupus nephritis, n (%)</td>
<td>51 (27.7%)</td>
<td>102 (55.7%)</td>
<td>91 (49.7%)</td>
<td>38 (20.7%)</td>
<td>74 (41.1%)</td>
<td>Nulliparous, n (%)</td>
<td>113 (64.1%)</td>
<td>39 (21.2%)</td>
<td>14 (7.6%)</td>
<td>Pregnancy outcome</td>
</tr>
<tr>
<td>31.0 (29.0-34.0)</td>
<td>16 (15.0%)</td>
<td>69 (64.5%)</td>
<td></td>
<td>25 (23.4%)</td>
<td>47 (44.3%)</td>
<td>55 (51.5%)</td>
<td>18 (16.8%)</td>
<td>34 (32.7%)</td>
<td>63 (58.9%)</td>
<td>32 (20.6%)</td>
<td>22 (20.6%)</td>
<td>1 (0.54%)</td>
<td>44 (25.9%)</td>
</tr>
<tr>
<td>30.0 (27.0-33.0)</td>
<td>13 (16.9%)</td>
<td>53 (68.8%)</td>
<td>Lupus nephritis, n (%)</td>
<td>21 (19.8%)</td>
<td>1 (0.54%)</td>
<td>45 (66.8%)</td>
<td>16 (20.8%)</td>
<td>30 (20.6%)</td>
<td>63 (58.9%)</td>
<td>21 (20.6%)</td>
<td>11 (10.2%)</td>
<td>1 (0.54%)</td>
<td>30 (34.9%)</td>
</tr>
</tbody>
</table>

1. last visit before pregnancy; 2. according to the 2019 EULAR recommendations; 3. until 16 w/g; 4. increase in SLE-DASI ≥ 4 or increase in prednisone ≥ 5mg/d, < 37 w/g