Conclusion: Therapeutic decision-making based on validated disease activity scales has allowed the BT optimization in approximately 53% of patients with RD. BT optimization allowed a pharmaceutical saving of €177,559.40 per year being higher in the SA (€850.40) followed by the RA (€707,853) and finally the Psa (€493,21). The BT optimization allows to reduce costs maintaining the effectiveness and safety.

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AB1151

COMPLIANCE/CONCORDANCE WITH MYCOPHENOLATE MOFETIL IN PATIENTS WITH CONNECTIVE TISSUE DISORDERS IN COVENTRY.
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Background: Connective tissue disorders like Systemic lupus erythematous (SLE) are multi-organ systemic conditions characterised by disordered immune function. Mycophenolate Mofetil (MMF) is commonly used for treatment of SLE and other connective tissue disorders like Sjogren’s syndrome, myositis and Scleroderma. Compliance with drugs remains a significant issue in management of these conditions and varying reports from across the world continue to show significant lack of concordance resulting in increased disease activity and damage.

Objectives: The aim of this study was to investigate the compliance/concordance specifically with MMF treatment among patients attending clinics at University Hospitals Coventry and Warwickshire NHS Trust (UHCW) with SLE and other connective tissue disorders.

Methods: Ethical approval was obtained through research and development department within the Trust. This is a retrospective study collating non-identifiable hospital pharmacy data in patients who requested the prescription for MMF drug between January 2015 and December 2018. Since MMF was required to be prescribed from the hospital (i.e. General practitioners within the region were unable to prescribe it), we have records for all prescriptions for these patients. We extracted information on sample size, frequency of prescription requested and length of follow-up. Clinical data were obtained from paper and electronic notes of the patients. Data were analysed using the data analysis tool pack for linear regression, on Microsoft Excel package version 16.29.1.

Results: We recruited 144 patients into this study, (74%) of these are females. Age range for this group was 2-89 years, median age was 45 (±11.2) years with a mean (±SD) age of 35.6 (±11.2) years and a disease duration of 8.8 (±6.2) years. 73.1% were White British, the remaining included 8.3% Indian, 5.5% Pakistani, 2.7% Black British, 2% Caucasian, 2.1% Chinese, and 6.3% other. Overall, we had 54 patients with SLE and 90 Patients with other connective tissue disorders. Good compliance (81-100%) with MMF therapy was seen in 49 patients, (34%). Poor compliance (0-20%) was seen in 13 patients, (9%). We found a significant correlation between lack of compliance and risk of flares (r = 0.25, p < 0.002), displayed in Figure 1. We also found a significant difference in compliance patterns depending on diagnosis and also on age. SLE patients were 34% less compliant with MMF in comparison to other connective tissue disorders. Demographics suggested the degree of compliance increased with age. Patients between 40-69 years of age were 65% more compliant in comparison to the age 20-39 years (p < 0.002).

Conclusion: SLE and connective tissue disorder patients within Coventry continue to have issues relating to compliance/concordance with MMF treatment and this appears to be worse in patients with SLE and in the 20-39 years of age. These patients also appear to be getting flares hence, this remains a major problem in the management of these conditions.

References:
Background: Rheumatoid arthritis (RA), psoriatic arthritis (PSA) and spondyloarthritis (SPA) are the most common inflammatory rheumatic diseases. Pain is the hallmark symptom in these conditions and pain relief is ranked first amongst treatment priorities in rheumatology.

Methods: Data were obtained from Intego over a 13-year time interval from 1999 to 2012. Intego is a Flemish GP-based morbidity registration network hosted at the Academic Center for General Practice of the KU Leuven, covering 2% of the Flemish general population. Patients classified under the International Classification of Primary Care codes L88 (rheumatoid/sero-positive arthritis) and L99 (musculoskeletal disease other) were selected for this study. Experienced rheumatologists verified if the keywords mapped to these codes corresponded to a diagnosis of RA/SPA/PSA. The date of these diagnoses in Intego was considered “baseline.” Controls were matched on age, gender, baseline date and GP practice in a 4:1 case ratio. Intego registers all electronic drug prescriptions by the GP. Anytime use of glucocorticoids, NSAIDs, opioids except tramadol, tramadol and paracetamol in the first 3 years after diagnosis was presented. Proportions of patients and controls on analgesic and anti-inflammatory drugs were compared by Chi-Square analyses.

Results: Over a 13-year period, 738, 229 and 167 patients were included with a diagnosis of RA, SPA or PSA, respectively. Table 1 presents the medication use of these populations. The three conditions had statistically significantly more prescriptions for all types of analgesic and anti-inflammatory drugs compared to controls. Approximately 70% of patients with an inflammatory rheumatic condition received mild pain medication (NSAIDs, tramadol and paracetamol) in the first three years after diagnosis. To note is the high use of opioids, even excluding tramadol, in these populations ranging up to 15%.

Table 1. 3-year analgesic and anti-inflammatory drug use in RA, SPA and PSA patients versus controls

<table>
<thead>
<tr>
<th>Medication</th>
<th>RA Number of patients</th>
<th>RA%</th>
<th>RA Control Number of patients</th>
<th>RA Control%</th>
<th>SPA Number of patients</th>
<th>SPA%</th>
<th>SPA Control Number of patients</th>
<th>SPA Control%</th>
<th>PSA Number of patients</th>
<th>PSA%</th>
<th>PSA Control Number of patients</th>
<th>PSA Control%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucocorticoids</td>
<td>241(33%)</td>
<td>348(12%)</td>
<td>29(13%)</td>
<td>70(8%)</td>
<td>263(9%)</td>
<td>34(18%)</td>
<td>23(14%)</td>
<td>51(31%)</td>
<td>141(21%)</td>
<td>45(7%)</td>
<td>126(14%)</td>
<td>45(7%)</td>
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<tr>
<td>NSAIDs</td>
<td>455(62%)</td>
<td>1156(39%)</td>
<td>161(32%)</td>
<td>340(37%)</td>
<td>161(32%)</td>
<td>340(37%)</td>
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<td>161(32%)</td>
<td>340(37%)</td>
<td>161(32%)</td>
<td>340(37%)</td>
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<tr>
<td>Opioids</td>
<td>114(14%)</td>
<td>267(40%)</td>
<td>121(70%)</td>
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<tr>
<td>Tramadol</td>
<td>87(12%)</td>
<td>150(20%)</td>
<td>21(14%)</td>
<td>51(31%)</td>
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<td>21(14%)</td>
<td>51(31%)</td>
</tr>
<tr>
<td>Paracetamol</td>
<td>233(32%)</td>
<td>598(20%)</td>
<td>63(28%)</td>
<td>165(18%)</td>
<td>63(28%)</td>
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<td>63(28%)</td>
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<td>63(28%)</td>
<td>165(18%)</td>
</tr>
<tr>
<td>Total analgesic</td>
<td>1193(161%)</td>
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<tr>
<td>Total anti-inflammatory drug use</td>
<td>1193(161%)</td>
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Conclusion: A few conclusions can be drawn from this work. Firstly, prevalence of vaccination increased after clinic creation, especially for Pneumococcal vaccine polyvalent, Influenza virus, Hepatitis A and B. We would expect the same results in the remaining vaccines in a broader population. Our results were also affected by stock rupture in our country. Secondly, this study shows the importance of a protocol, which helps systemise assessment of infectious risk before biological therapy, by analysing thoroughly vaccination history and keeping it updated. Lastly, shared responsibility between rheumatologists and infectologists enables them to leverage their skills and focus, leading to ultimate gains for the patient. We hope this work motivates colleagues to start similar practices in their centres.

References:

Disclosure of Interests: None declared.

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