VARIATIONS IN THE PRESCRIPTION PATTERNS OF PHYSICIANS FOR PATIENTS WITH RA ACROSS SEVERAL ARAB STATES

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Background: Variations exist in the prescription of non-biologic and biologic DMARDS for patients with Rheumatoid Arthritis (RA). Low and middle income countries use Methotrexate (MTX) and Biologics less frequently compared to high-income countries. These variations are attributed to provider and patient preferences, practice settings, and country’s GDP.

Objectives: To examine the prevalence of prescription of MTX & Anti-TNF drugs for RA treatment in some Arab States.

Methods: The Genetics of Rheumatoid Arthritis in some Arab States (GRAAS) is a multinational study designed to study the genetics & clinical characteristics of Arab RA patients from Jordan, Kingdom of Saudi Arabia (KSA), Lebanon, Qatar and the United Arab Emirates (UAE). Inclusion criteria are age>18, Arab ancestry & diagnosis of RA based on ACR criteria. Data collected includes demographics, ancestry, disease duration, comorbidities, and the use of DMARDS. To assess prescribing patterns, we analyzed the prevalence of ever use of MTX and available anti-TNF (Infliximab, Etanercept and Adalimumab) in each of the countries. Because of difference in countries per Capita GDP, the countries were divided into two regions: Levant (Jordan and Lebanon) and Gulf (KSA and Qatar). Analysis using mean, standard deviation, t test, frequency and Chi square were used as appropriate. Adjusted analysis was done using logistic regression.

Results: 470 patients were included in the study. Mean age is 49±13.0 years. Female to male ratio is 5:1. Mean disease duration is 10.2±8.74 years. 52.3% of the patients were positive for both ACPA and RF. Patients from the Gulf were more likely to be seropositive than patients from the Levant (57% vs 44% p=0.009) and significantly less likely to be seroengative (14% vs. 28% p=0.01). Methotrexate was the most commonly prescribed DMARD (87.0%). Anti-TNF drugs were prescribed in 31.2%. Patients from the Levant were less likely to receive MTX and anti-TNF as compared to patients from the Gulf (Table). After adjusting for age, gender, seropositivity & disease duration, patients from the Gulf are more likely to have received any anti-TNF (OR=3.78).

Frequency of Prescription of Methotrexate and Anti-TNF drugs across sites

<table>
<thead>
<tr>
<th>Medication</th>
<th>Jordan N=130</th>
<th>KSA N=96</th>
<th>Lebanon N=80</th>
<th>Qatar N=162</th>
<th>Levant N=210</th>
<th>Gulf N=258</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methotrexate</td>
<td>76.2%</td>
<td>97.9%</td>
<td>86.6%</td>
<td>89.5%</td>
<td>80.2%</td>
<td>92.6%</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>At least one anti-TNF</td>
<td>11.5%</td>
<td>51.0%</td>
<td>23.8%</td>
<td>38.9%</td>
<td>16.2%</td>
<td>43.4%</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Conclusions: Patterns of prescription of MTX & Anti-TNF for RA patients vary among Arab countries. Countries in the Gulf have prescription frequency for MTX similar to rates from developed countries, but high frequency of prescription of Anti-TNF in excess of what is reported from the developed countries. In depth analysis of patients level of disease activity, physician practice patterns and site, & health insurance type is needed to understand these variations.

References: 1. Putrik et al., Inequities in access to biologic and synthetic DMARDs across 46 European countries, Ann Rheum Dis.2014 Jan;73(1).

Disclosure of Interest: None declared