MORTALITY AND CAUSE OF DEATH IN KOREAN PATIENTS WITH RHEUMATOID ARTHRITIS: BASED ON A LARGE COHORT.

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Background: Rheumatoid arthritis (RA) is a common chronic inflammatory disease characterized by arthritis of multiple joints. Although the use of corticosteroid and extra-articular complications may lead increased mortality of patients with RA and it have been confirmed by hundreds of studies, the prognosis of RA has improved over the past decades with the introduction of biologics disease-modifying anti-rheumatic drugs and treat-to-target strategy. Along with the increase of overall survival of RA, the needs for re-assessment of actual life expectancy in patients with RA have also been increased.

Objectives: To investigate the cause and the risk of death of Korean patients with RA in a large RA cohort.

Methods: We analyzed patients in Hanyang BAE RA cohort who fulfilled the American College of Rheumatology criteria. A total of 2,355 patients were enrolled from October 2001 to December 2015. Mortality data were derived by linking with data from the Korean National Statistical Office and date and cause of death were identified. Standardized Mortality Ratio (SMR) was estimated by dividing the observed number of deaths by the expected number of deaths of age- and sex-matched general population. Confidence intervals were calculated based on the Poisson distribution.

Results: Over the observation period, 225 deaths were reported. The age at enrollment was 50.8 ± 12.3 years and disease duration was 18.1 ± 10.4 years. The most common cause of death was malignancy (40 cases) followed by respiratory disease (21 cases). Total SMR was increased [1.7, 95% CI 1.5-2.0] but age- and sex-adjusted SMR was not increased [SMR 1.0, (95% CI 0.9-1.1)]. When we classify patients by age groups, the adjusted SMR in patients aged 15-39, aged 40-59 and aged over 60 were 0.7 (observed death 1, expected death 1.5, 95% CI 0-2.0), 1.0 (observed death 28, expected death 21.0, 95% CI 0.8-3.0) and 0.9 (observed death 196, expected death 221.0, 95% CI 0.8-3.0), respectively. Compared with survivors, patients who died were more likely to be male, diagnosed with RA at older age, more likely to be smoker and current smoker (25.1% vs. 15.2%, p<0.001) and accompanied by more comorbidities including hypertension (28.0% vs. 12.5%, p<0.001) and diabetes mellitus (10.7% vs. 3.9%, p<0.001).

Conclusion: The overall age- and sex-matched SMR of patients with RA was similar with that of general population. However, compared with survivors, patients who died were more likely to be male, diagnosed with RA at older age, more likely to be smoker and current smoker, they have more hypertension and diabetes mellitus. Therefore, attention should be paid not only to RA itself but also managing comorbidities to improve the survival of patients with RA.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.639
The occurrence of childhood IgAV thus signifies the presence of a sustained predisposition to illness.

**Acknowledgments:** Supported by an unrestricted grant from the Arthritis Foundation of Western Australia.

**Disclosure of Interests:** None declared.

**Conclusion:** Early damage to small arterial and arteriolar walls in IgAV and related conditions is likely to involve a dysregulated anti-angiogenic response, leading to aberrant vascular remodeling. There is emerging evidence that abnormalities of the renin-angiotensin system (RAS) play a role in the development of IgAV.

**References:**


**Table 1.**

<table>
<thead>
<tr>
<th>Lipid mediator</th>
<th>Crude</th>
<th>Adjusteda</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-HETE</td>
<td>2.10 (1.12, 3.92)</td>
<td>2.41 (1.43, 4.07)</td>
</tr>
<tr>
<td>15S-HETE</td>
<td>1.61 (0.88, 2.93)</td>
<td>1.52 (0.87, 2.65)</td>
</tr>
<tr>
<td>17S-HDHA</td>
<td>1.59 (0.65, 3.74)</td>
<td>1.61 (0.72, 3.56)</td>
</tr>
</tbody>
</table>

a dichotomized as <limit of detection (reference) or detected

**Conclusion:** There is evidence that IgAV and related conditions are associated with an imbalance in the RAS, which may be a critical factor in the pathogenesis of these diseases. Further studies are needed to elucidate the specific role of the RAS in the development of IgAV and related conditions.