OBJECTIVES: We hypothesised that if IMB is indeed an RA-feature, then (1) at diagnosis its presence associates with other measures of local inflammation (synovitis, tenosynovitis and osteitis) and (2) it responds to DMARD therapy similarly as these other local inflammatory measures. These hypotheses were tested in a comprehensive MRI-study.

METHODS: 157 consecutive early RA patients underwent unilateral contrast-enhanced 1.5T MRI of the forefoot at diagnosis. MRIs were evaluated for presence of IMB and for synovitis, tenosynovitis and osteitis in line with the RA MRI scoring system (summed as RAMRIS-inflammation). MRIs at 4, 12 and 24 months were evaluated for presence and size of IMB-lesions in patients who had IMB at base-line and received early DMARD-therapy.

REGRESSION was used for analyses at patient-level; generalised estimating equations were used for bursa-level analyses. Stratification for ACPA was performed.

RESULTS: 69% of RA patients had ≥1 IMB. In multivariable analyses on bursa-level, presence of IMB was independently associated with local presence of synovitis and tenosynovitis (OR 1.69 [95%CI 1.12–2.57] and 2.83 [1.80–4.44], respectively), but not with osteitis. On patient-level, presence of IMB was most strongly associated with tenosynovitis (OR 2.92 [1.62–5.24]). During treatment with DMARDs, the average size of IMB-lesions decreased (Figure 1). This decrease was associated with decrease in RAMRIS-inflammation scores; most strongly with a decrease in synovitis but not in osteitis. Within ACPA-positive and ACPA-negative RA similar results were obtained.

CONCLUSION: IMB particularly accompanies inflammation of the synovial lining of joints and tendon-sheaths, both regarding simultaneous occurrence at diagnosis and simultaneous treatment-response. These findings suggest that IMB represents juxta-articular synovial inflammation and indeed is a hallmark of early RA.

REFERENCES:

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Background: Patients with rheumatoid arthritis (RA) have an increased burden of multimorbidity. Racial/ethnic disparities have also been associated with an increased burden of multimorbidity.

Objectives: We aimed to compare multimorbidity among different racial/ethnic groups and geographic regions of the US in patients with RA and comparators without RA.

Methods: We used a large longitudinal, real-world data warehouse with de-identified administrative claims for commercial and Medicare Advantage enrollees, to identify cases of RA and matched controls. Cases were defined as patients aged ≥18 years with ≥2 diagnoses of RA in January 1, 2010 - June 30, 2019 and ≥1 prescription fill for methotrexate in the year after the first RA diagnosis. Controls were persons without RA matched 1:1 to RA cases on age, sex, census region, calendar year of index date (corresponding to the date of second diagnosis code for RA), and length of prior medical/ pharmacy coverage. Race was classified as non-Hispanic White (White), non-Hispanic Black (Black), Asian, Hispanic, or other/unknown, based on self-report or derived rule sets. Multimorbidity (2 or more comorbidities) was defined using 25 chronic comorbidities from a combination of the Charlson and Elixhauser Comorbidity Indices assessed during the year prior to index date. Rheumatic comorbidities were not included. Logistic regression models were used to estimate odds ratios (OR) with 95% confidence intervals (CI).

Results: The study included 16,363 cases with RA and 16,363 matched non-RA comparators (mean age 58.2 years, 70.2% female for both cohorts). Geographic regions were the same in both cohorts: 50% South, 26% Midwest, 13% West, and 11% Northeast. Race/ethnicity was not part of the matching criteria and varied slightly between the cohorts: among RA (non-RA) patients, 74% (74%) were White, 11% (9%) Hispanic, 10% (9%) Black, 3% (4%) Asian, and 3% (4%) other/unknown. Patients with RA had more multimorbidity than non-RA subjects (51.3% vs 44.8%). Multimorbidity comparisons across US geographic regions were similar in both cohorts, with comparable multimorbidity levels for patients in the West and Midwest and higher levels for those in the Northeast and South (Figure 1). Among the non-RA patients, 43.5% of Whites experienced multimorbidity, compared to 33.9% of Asians, 46.1% of Hispanics, and 58.4% of Blacks. These associations remained after adjustment for age, sex, and geographic region, with significantly lower multimorbidity among Asians (OR: 0.81; 95%CI: 0.67-0.99) and significantly higher multimorbidity among Hispanics (OR: 1.21; 95%CI: 1.07-1.37) and Blacks (OR: 1.74; 95%CI: 1.54-1.97), compared to Whites in the non-RA cohort. Among the RA patients, racial/ethnic differences were less pronounced; 50.6% of Whites, 42.8% of Asians, 48.8% of Hispanics, and 58.4% of Blacks experienced multimorbidity. Adjusted analyses revealed no significant differences in multimorbidity for Asians (OR: 0.88; 95%CI: 0.70-1.08) and Hispanics (OR: 1.06; 95%CI: 0.95-1.19) and a less pronounced increase in multimorbidity among Blacks (OR: 1.32; 95%CI: 1.17-1.49) compared to Whites in the RA cohort.

Conclusion: This large nationwide study showed increased occurrence of multimorbidity in RA versus non-RA patients and in both cohorts for residents of the Northeast and South regions of the US. Racial/ethnic disparities in multimorbidity were more pronounced among patients without RA compared to RA patients. This indicates the effects of RA and race/ethnicity on multimorbidity do not aggregate. The underlying mechanisms for these associations require further investigation.

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POS0024 ESTIMATED PREVALENCE, INCIDENCE AND HEALTHCARE COSTS OF SJÖGREN’S SYNDROME IN FRANCE: A NATIONAL CLAIMS-BASED STUDY


Background: Sjögren’s syndrome (SS) is a chronic, systemic autoimmune disorder characterised by oral and ocular dryness related to lymphocytic infiltration of exocrine glands.1-3 Extra-glandular manifestations may include fatigue, musculoskeletal pain and glomerulonephritis.1,3 SS can present as primary SS (pSS)