FRI0330

BODY MASS INDEX AND DISEASE ACTIVITY IN CHRONIC INFLAMMATORY RHEUMATIC DISEASES: RESULTS OF THE CARDIOVASCULAR IN RHEUMATOLOGY (CARMA) PROJECT

R. López-González¹, J. A. Valero Jaimes², M. A. Martín-Martínez³, S. Castañeda⁴, C. García Gómez⁵, F. Sánchez-Alonso⁶, C. González Juanatey⁷, E. Revuelta-Evrad⁸, C. Perez-García⁹, V. Torrente Segarra¹⁰, T. Pérez Sandoval¹¹, J. Llorca¹², M. A. González-Gay¹³ on behalf of CARMA Project Collaborative Group. ¹Complejo Hospitalario de Zamora, Rheumatology, Zamora, Spain; ²Hospital Universitario de Donostia, San Sebastián, Spain; ³Research Unit of Spanish Society of Rheumatology, Madrid, Spain; ⁴Hospital Universitario de la Princesa, Division of Rheumatology, Madrid, Spain; ⁵Consorci Sanitari de Terrassa, Division of Rheumatology, Terrassa, Barcelona, Spain; ⁶Research Unit of Spanish Society of Rheumatology, Madrid, Spain; ⁷Hospital Lucus Augusti, Division of Cardiology, Lugo, Spain; ⁸Hospital General Universitario de Ciudad Real, Division of Rheumatology, Ciudad Real, Spain; ⁹Hospital del Mar, Division of Rheumatology, Barcelona, Spain; ¹⁰Hospital Comarcal Alt Penedès Garraf, Division of Rheumatology, Barcelona, Spain; ¹¹Complejo Asistencial Universitario de León, Division of Rheumatology, León, Spain; ¹²University of Cantabria and CIBER Epidemiología y Salud Pública, Santander, Spain; ¹³University of Cantabria. Hospital Universitario Marqués de Valdecilla, Division of Rheumatology, Santander, Spain

Objectives: Since obesity has been associated with higher inflammatory burden and worse response to therapy in patients with chronic inflammatory joint diseases (CIJDs), we aimed to confirm the potential association between body mass index (BMI) and disease activity in a large series of patients with CIJDs included in the Spanish Cardiovascular in rheumatology (CARMA) registry.

Methods: Baseline data assessment of patients included from the CARMA project, a 10-year prospective study of patients with rheumatoid arthritis (RA), ankylosing spondylitis (AS) and psoriatic arthritis (PsA) attending outpatient rheumatology clinics from 67 Spanish hospitals. Obesity was defined when BMI (kg/m²) was >30 according to the WHO criteria. Scores used to evaluate disease activity were DAS28 in RA, BASDAI in AS, and modified DAS for PsA.

Results: Data from 2,234 patients (775 RA, 738 AS and 721 PsA) were assessed. The mean±SD BMI at the baseline visit were: 26.9±4.8 in RA, 27.4±4.4 in AS and 28.2±4.7 in PsA. Multivariate analyses shown a positive association between BMI and disease activity in patients with RA (β-coefficient: 0.029; 95% CI: 0.01-0.05; p=0.007) and in those with PsA (β-coefficient: 0.036; 95% CI: 0.015-0.058; p=0.001). By contrast, there was no significant association between BMI and disease activity in patients with AS (β-coefficient: 0.001; 95% CI: -0.026-0.03; p=0.926).

In patients with RA, female gender (β-coefficient: 0.546; 95% CI: 0.316-0.775; p<0.001) and rheumatoid factor status (seropositivity for RF) (β-coefficient: 0.328; 95% CI: 0.106-0.549; p=0.004) also showed a positive association with disease activity, while physical activity revealed a negative association with disease activity (β-coefficient: -0.280; 95% CI: -0.479-(-0.081); p=0.006).

Besides BMI, female gender (β-coefficient: 0.720; 95% CI: 0.524-0.916; p<0.001), Psoriasis Area Severity Index (β-coefficient: 0.038; 95% CI: 0.012-0.066; p=0.005) and enthesitis (β-coefficient: 0.256; 95% CI: 0.199-0.313; p<0.001) were also positively associated with disease activity in PsA.

As observed in RA and PsA, female gender was also associated with disease activity patients with AS (β-coefficient: 0.565; 95% CI: 0.299-0.832; p<0.001).

Conclusion: BMI is associated with disease activity in RA and PsA but not in AS. Since obesity is a potentially modifiable factor, disease activity was associated with female gender and RF status in RA and with Psoriasis Area Severity Index and enthesitis in PsA. Adequate control over body weight may improve the outcome of patients with CIJDs and, therefore, weight control should be included in the strategy of management of these patients.

Disclosure of Interests: Ruth López-González: None declared, Jesús Alejandro Valero Jaimes: None declared, María Auxiliadora Martín-Martínez: None declared, Santos Castañeda: None declared, Carmen García Gómez: None declared, Fernando Sánchez-Alonso: None declared, Carlos González Juanatey: None declared, Eva Revuelta-Evrad: None declared, Carolina Perez-García: None declared, Vicenç Torrente Segarra: None declared, Trinidad Pérez Sandoval: None declared, Javier Llorca: None declared, Miguel A González-Gay Grant/research support from: Pfizer, Abbvie, MSD, Speakers bureau: Pfizer, Abbvie, MSD

DOI: 10.1136/annrheumdis-2020-eular.3591

FRI0331

COMPARISON OF THE THERAPEUTIC TRAJECTORIES OF PATIENTS WITH OLIGO AND POLYARTICULAR PSORIATIC ARTHRITIS. A REPORT FROM THE RHUMADATA® CLINICAL DATABASE AND REGISTRY

D. Choquette¹, L. Choquette Sauvageau¹, L. Bessette², I. Ferdinand¹, P. Haraoui¹, F. Massicotte¹, J. P. Pelletier¹, J. P. Raynaud¹, M. A. Rémillard¹,

D. Sauvageau¹, É. Villeneuve¹, L. Coupal¹. ¹Institut de Recherche en Rhumatologie de Montréal, Montréal, Canada; ²Centre de l'Ostéoporose et de Rhumatologie de Québec, Québec, Canada

Background: Psoriatic Arthritis (PsA) most frequently presents as a polyarthritis or (less often) as an oligoarthritis [1]. Most of the patients in the original description of Moll and Wight had an oligoarticular presentation [2]. However, other studies have not found the same distribution in all patient populations [3]. Treatment response over time across presentation types has not been explored thoroughly in recent medical literature.

Objectives: Using our proposed definition of oligo and polyarticular PsA status, based on the (rounded) mean of the first four available joint counts, we examine treatment sequences in each group.

Methods: Data from patients participating in the RHUMADATA® clinical database and registry diagnosed with PsA were extracted on January 5th, 2020. Joint count classification (oligo vs. poly) was assessed from the average of the first four available 66/68 joint counts. Patients were classified as having a polyarticular form of PsA if the (rounded) average, five or more of their joints were assessed as being swollen and/or tender. Subjects with four or less swollen or tender joints were classified as patients having oligoarticular PsA. Time spent treated with non-DMARDs, csDMARDs and bDMARDs, time to treatment (to csDMARDs and bDMARDs) and treatment selection were assessed from the entire PsA cohort. Continuous variables were tested using t-tests and binary variables using Fisher's exact test.

Results: The data from all patients diagnosed with PsA (n=1029) was extracted from the RHUMADATA® clinical database and registry. All but 151 (15%) were classifiable, 470 (46%) were classified as oligoarticular PsA patients and 408 (39%) as polyarticular. Time from the first symptoms to the first clinic visit was 4.6 ± 6.5 years and 3.7 ± 6.6 (p-value=0.1311) years for the patients classified as oligo and poly respectively. A total of 951 patients were treated with a csDMARD (144 of those could not be classified as oligo or poly). For those, time from diagnosis to first csDMARD (prior to any bDMARD) treatment was 1.7 ± 5.3 (oligo) years and 2.0 ± 7.0 (poly) years (p-value=0.4114). Methotrexate (MTX), hydroxychloroquine (HCQ) and leflunomide (LEF) were more frequently prescribed to polyarticular than oligoarticular PsA patients (MTX: 70% (poly) vs. 48% (oligo), p-value<.0001, HCQ: 41% vs. 25%, p-value <.0001, LEF: 17% vs. 8%, p-value<.0001, Sulfasalazine (SSZ): 17% vs. 19%, p-value=0.5232, Other csDMARDs: 5% vs. 4.5%, p-value=0.8688). A total of 648 patients were treated with a bDMARD (151 of those could not be classified as oligo or poly). For those, time from first csDMARD Rx to first bDMARD treatment was 6.3 ± 4.6 (oligo) years and 7.0 ± 4.7 years (p-value=0.0865). On average, over the entire treatment history, oligoarticular patients received 1.7 ± 1.2 biologic agents and polyarticular 2.0 ± 1.4, p-value=0.0110. bDMARDs were administered over 3.6 ± 3.6 years for oligo and 4.5 ± 3.9 years for poly, p-value=0.2122.

Conclusion: Polyarticular PsA patients appear to be more aggressively treated than oligoarticular patients during the csDMARDs period. Although durations on bDMARDs are statistically similar, polyarticular patients change biotreatment more frequently.

References:

- [1] Gladman DD, Ritchlin C, et al. Clinical manifestations and diagnosis of psoriatic arthritis. Update 2019.
- [2] Wright V, Moll JM. Psoriatic arthritis. Bull Rheum Dis 1971; 21:627.
- [3] Gladman DD. Psoriatic arthritis. Baillieres Clin Rheumatol 1995; 9:319.

Disclosure of Interests: Denis Choquette Grant/research support from: Rhumadata is supported by grants from Pfizer, Amgen, Abbvie, Gilead, BMS, Novartis, Sandoz, Eli Lilly, Consultant of: Pfizer, Amgen, Abbvie, Gilead, BMS, Novartis, Sandoz, Eli Lilly, Speakers bureau: Pfizer, Amgen, Abbvie, Gilead, BMS, Novartis, Sandoz, Eli Lilly, Loïc Choquette Sauvageau: None declared, Louis Bessette Grant/research support from: AbbVie, Amgen, Bristol-Myers Squibb, Celgene, Eli Lilly, Janssen, Merck, Novartis, Pfizer, Roche, Sanofi, UCB Pharma, Consultant of: AbbVie, Amgen, Bristol-Myers Squibb, Celgene, Eli Lilly, Janssen, Merck, Novartis, Pfizer, Roche, Sanofi, UCB Pharma, Speakers bureau: AbbVie, Amgen, Bristol-Myers Squibb, Celgene, Eli Lilly, Janssen, Merck, Novartis, Pfizer, Sanofi, Isabelle Ferdinand Consultant of: Pfizer, Abbvie, Amgen, Novartis, Speakers bureau: Pfizer, Amgen, Paul Haraoui Grant/research support from: AbbVie, Amgen, BMS, Janssen, Pfizer, Roche, and UCB, Consultant of: AbbVie, Amgen, BMS, Celgene, Eli Lilly, Janssen, Merck, Novartis, Pfizer, Roche, and UCB, Speakers bureau: Pfizer, Speakers bureau: Amgen, BMS, Janssen, Pfizer, and UCB, Frédéric Massicotte Consultant of: Abbvie, Janssen, Lilly, Pfizer, Speakers bureau: Janssen, Jean-Pierre Pelletier Shareholder of: ArthroLab Inc., Grant/research support from: TRB Chemedica, Speakers bureau: TRB Chemedica and Mylan, Jean-Pierre Raynaud Consultant of: ArthroLab Inc., Marie-Anaïs Rémillard Consultant of: Abbvie, Amgen, Eli Lilly, Novartis, Pfizer, Sandoz, Paid instructor for: Abbvie, Amgen, Eli Lilly, Novartis, Pfizer, Sandoz, Speakers bureau: Abbvie, Amgen, Eli Lilly, Novartis, Pfizer, Sandoz, Diane Sauvageau: None declared, Édith Villeneuve Consultant of: Abbvie, Amgen, BMS, Celgene, Pfizer, Roche, Sanofi-Genzyme,