31 positive patients were 49.4 and 47, while negative patients' scores were 36.9 and 38, respectively ($p=0.002$). Thus, 14–3–31 positive patients had high disease activity while 14–3–31 negative patients had moderate disease activity. Mean levels of matrix metalloproteinase 3 (MMP-3), serum amyloid A (SAA), and CRP in 14–3–31 positive versus negative were 52.3 ng/mL and 28.4 ng/mL ($p=0.01$), 24.3 mg/mL and 6.96 mg/mL ($p=0.02$), and 21.5 mg/L and 9.82 mg/L ($p=0.02$), respectively.

Conclusions: 14–3–31 positive RA patients have higher disease activity based on MBDA score and are associated with higher levels of MMP-3, SAA, and CRP. MMP-3 is associated with joint destruction through degradation of the components of extracellular matrix in the synovial joint. SAA and CRP are acute phase reactants but SAA has been linked with increased cardiovascular and renal disease in RA patients. 14–3–31 positive patients should be treated aggressively to decrease disease activity and limit extra-articular manifestations.²

REFERENCE:

- [1] Maksymowych W, Naides S, Bykerk V, Siminovich K, et al. Serum 14–3–31 is a Novel Marker that Complements Current Serological Measurements to Enhance Detection of Patients with Rheumatoid Arthritis. *J Rheumatol* 2014;41:2104–2113.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.1836

AB0297

PREDICTORS OF AN INADEQUATE RESPONSE TO TREATMENT IN LATIN AMERICAN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS

R.V. Gamboa-Cárdenas^{1,2}, M. Ugarte-Gil^{1,3}, L. Massardo⁴, M.P. Sacnun⁵, A. Granel⁶, L. Catoggio⁷, F.A. Lima-Corrêa⁸, S. Appenzeller⁹, A. Azevedo¹⁰, M. Keiserman¹¹, J. Rueda¹², L. Zurita¹³, M. Moreno¹⁴, M. Cardiel¹⁵, E. Acevedo-Vasquez¹, G.S. Alarcón¹⁶, B. Pons-Estel¹⁷. ¹Rheumatology, Hospital Nacional Guillermo Almenara. EsSalud; ²Rheumatology, Universidad Nacional Mayor de San Marcos; ³Medicine, Universidad Científica del Sur, Lima, Peru; ⁴Clinical Immunology and Rheumatology, Universidad San Sebastián, Santiago de Chile, Chile; ⁵Servicio de Reumatología y Colagenopatías, Hospital Provincial de Rosario, Rosario; ⁶Rheumatology, Hospital San Roque, La Plata; ⁷Rheumatology Section, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina; ⁸Rheumatology, Hospital Universitário de Brasília, Brasília; ⁹Universidade Estadual de Campinas (Unicamp), Campinas; ¹⁰Rheumatology, Federal University of Minas Gerais, Minas Gerais; ¹¹Rheumatology, Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), Porto Alegre, Brazil; ¹²Rheumatology, Centro Médico Imbanaco, Cali, Colombia; ¹³Rheumatology, Clínica Alcívar; ¹⁴Rheumatology, Hospital Luis Vernaza, Guayaquil, Ecuador; ¹⁵Rheumatology Section, Hospital General Dr Miguel Silva, Morelia, Mexico; ¹⁶Rheumatology Section, Alabama University at Birmingham, USA, Birmingham, USA; ¹⁷Rheumatology, Centro Regional de Enfermedades Autoinmunes y Reumáticas (CREAR), Sanatorio Parque, Rosario, Argentina, Rosario, Argentina

Background: Inadequate response to treatment in early rheumatoid arthritis (RA) is associated with adverse consequences. We have previously shown high baseline levels of disease activity in Latin American RA patients.¹

Objectives: To identify the baseline predictive factors of inadequate response to treatment in patients with early RA from a GLADAR cohort, at one year from cohort entry.

Methods: GLADAR cohort includes 1093 consecutive RA patients with disease <1 year from 46 centres in 14 Latin American countries. For these analyses, patients with complete clinical and laboratory assessments with DAS28-ESR>3.2 at the baseline, and one-year follow up visits were included. Inadequate treatment response was ascertained with the EULAR definition which is based on DAS28-ESR obtained at one-year of follow up [a variation ≤ 0.6 in any category of activity (mild, moderate or severe) and a variation >0.6 but ≤ 1.2 in the high activity category]. Gender, age at diagnosis, diagnosis delay, socioeconomic status (by the Graffar scale), ethnicity, medical coverage, rural origin, rheumatoid factor (RF) positivity, disability (HAQ-DI), DMARDs use, corticosteroid use, and DMARD treatment delays were examined as potential predictive factors of this outcome. Univariable and multivariable binary logistic regression models, using a stepdown technique were examined in order to determine the predictors of response at 1 year.

Results: Four hundred and forty-eight patients were included. Three hundred and eighty-five (85.9%) were female; the mean (SD) age at diagnosis was 46.1 (13.6) years; 78.3% had medical coverage and 347 patients (77.5%) were RF

positive. The mean baseline DAS28-ESR was 6.3 (1.4). EULAR response was met by 347 (77.5%) patients at 1 year. Three hundred patients (67%) have received glucocorticoids, 78.8% at least one DMARD and only 1.1% had received at least one biologic compound. The baseline HAQ-DI was 1.5 (0.0–3.0). Predictors of non-EULAR response at 1 year were: female gender (OR=2.4; CI:1.0–5.6; $p=0.039$), a higher baseline HAQ-DI (OR=1.7; CI:1.2–2.4; $p=0.003$) whereas protective factors were higher DAS28-ESR (OR=0.6; CI:0.4–0.7; $p<0.001$) and having medical coverage (OR=0.5; CI:0.3–0.9; $p=0.025$).

Conclusions: We have identified baseline predictors of adverse response to treatment in LA patients with early RA. Absence of medical coverage seems to be an additional adverse factor associated with poor results. Other factors such as early response/remission or adherence to treatment should be taken into account.

REFERENCE:

- [1] Massardo L. *Arthritis Care Res (Hoboken)* 2012;64(8):1135–4.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5032

AB0298

A LOWER WAIST CIRCUMFERENCE IS ASSOCIATED WITH CLINICAL REMISSION IN PATIENTS WITH ESTABLISHED RHEUMATOID ARTHRITIS

R.V. Gamboa-Cárdenas^{1,2}, M.F. Ugarte-Gil^{2,3}, M. Medina², F. Zevallos², V. Pimentel-Quiroz², C. Elera-Fitzcarrald^{2,3}, C. Reategui-Sokolova², J. Alfaro-Lozano², J.M. Cucho-Venegas², Z. Rodríguez-Bellido^{1,2}, C.A. Pastor-Asurza^{1,2}, R. A. Perich-Campos^{1,2}. ¹Universidad Nacional Mayor de San Marcos; ²Rheumatology, Hospital Nacional Guillermo Almenara EsSalud; ³Universidad Científica del Sur, Lima, Peru

Background: Abdominal Obesity is highly prevalent in patients with RA and this condition is associated with adverse metabolic outcomes, but information about the impact of this condition in clinical activity disease is scarce, specially in our region

Objectives: To assess the association between central obesity with baseline clinical activity in a cohort of patients with established rheumatoid arthritis (RA).

Methods: Cross-sectional baseline analysis of a single centre RA cohort. This cohort began at 2011 and includes patients with a diagnosis of RA ACR EULAR 2010 criteria), followed by semestral visits. In this analysis, clinical disease activity was measured by SDAI, clinical remission and low disease activity (LDA) was defining according SDAI categories (a value <3.3 , and ≤ 11 , respectively), also definition of remission by the ACR-EULAR 2011 was applied (tender and swollen joint counts ≤ 1 , CRP ≤ 1 mg/dl, and PGA ≤ 1 with patient-reported outcomes on a scale of 0–10, or SDAI ≤ 3.3). Patients with chronic pain disease (fibromyalgia, neuropathic pain and neurologic disorders such as neuropathies) and diagnosis of depression were excluded. Waist circumference (WC) was measured as a continue variable (cm). Potential basal confounders associated with activity disease were analysed: socio demographics variables (age at diagnosis, gender, disease duration, delay of DMARDs treatment, education), anticitrullinated antibody peptide (antiCCP), medication (use and dose of corticosteroid, use of cDMARDs and bDMARDs). Continuous variables were expressed as means and SDs, and categorical variables as percentages and 95% confidence intervals (95% CIs). Univariable and multivariable binary logistic regression models were examined in order to determine the association between abdominal perimeter and remission.

Results: Four hundred and twenty-five from 596 subjects of the cohort were include. The mean (SD) age was 58.5 (11.8) years. Disease duration was 15.2 (14.0) years; 90.4% were women and 75.8% were anti CCP positive. Two hundred and fifty-one patients (59.1%) have received glucocorticoids, 50.1% at least one DMARD and only 5.4% had received at least one biologic compound. The mean WC was 98.2 (11.3) cm and central obesity prevalence was 87.8% in men and 96.7% in woman. The baseline SDAI was 29.9 (24.1). Remission was met only by 1.7% patients and remission/LDA by 13.2% subjects. In the univariate analysis, a less WC was associated with remission (OR=0.9; CI:0.8–0.9; $p=0.042$); this association remained significant in the multivariable analysis (OR=0.9; CI:0.8–0.9; $p=0.022$).

Conclusions: A lower waist circumference is associated with clinical remission in patients with established RA. This condition should be taken in account in the baseline measure of activity disease.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.7385