SAT0092

CARDIOVASCULAR RISK ASSESSMENT IN PATIENTS WITH AUTOIMMUNE RHEUMATIC DISEASES: AN ITALIAN RHEUMATOLOGISTS' SURVEY

F.R. Spinelli¹, F. Cacciapaglia², F. Atzeni³, G. Erre⁴, A. Manfredi⁵, E. Bartoloni Bocchi⁶, M. Piga⁷, G. Sakellariou⁸, O. Viapiana⁹, E. Gremese^{10,11}. ¹Sapienza Università di Roma, Rheumatology Unit, Rome, Italy; ²Azienda Ospedaliero Universitaria Policlinico di Bari, Rheumatology Unit, Bari, Italy; ³Azienda Ospedaliero Universitaria Policlinico Gaetano Martino, Rheumatology Unit, Messina, Italy; ⁴Azienda Ospedaliero Universitaria Sassari, Rheumatology Unit, Sassari, Italy; ⁵Policlinico di Modena, Rheumatology Unit, Modena, Italy; ⁶Università degli studi di Perugia, Rheumatology Unit, Perugia, Italy; ⁷Università di Cagliari, Rheumatology Unit, Cagliari, Italy; ⁸Università degli studi di Pavia, Rheumatology Unit, Pavia, Italy; ⁹Università degli studi di Verona, Rheumatology Unit, Verona, Italy; ¹⁰Università Cattolica del Sacro Cuore, Rheumatology Unit, Rome, Italy; ¹¹Fondazione Policlinico Universitario A. Gemelli IRCCS, Rheumatology Division, Rome, Italy

Background: Cardiovascular (CV) disease is the leading cause of morbidity and mortality in patients with inflammatory arthritis. The growing attention to the CV risk characterizing patients with autoimmune inflammatory disease led EULAR to provide recommendations on CV risk management (1). To date, there are no data on the adherence to EULAR recommendation among Italian rheumatologists.

Objectives: Our objective was to measure the level of awareness and the attitude to manage CV risk.

Methods: Italian rheumatologists were invited to anonymously answer a web-based questionnaire designed by the steering committee of the Cardiovascular and Obesity in Rheumatic Diseases (CORDIS) study group of the Italian Society of Rheumatology. The first part of the questionnaire concerned demographic information; the subsequent questions concerned the attitude to assess CV risk and the limitations for not assessing, the specific CV risks considered in the clinical practice and their management. Data are presented using standard summary statistics and were expressed as mean $\pm$ standard deviation or median (interquartile range) according to variables' distribution.

Results: One thousand-three hundred rheumatologists (of whom 500 are under 40 and 100 over 70 years of age) have been invited by email to complete the survey. The questionnaire has been filled by 102 rheumatologists (7.85%) (53 females and 49 males) with a median age of 38 years (32-48) and a median of 4 (0-15) years of specialization. Most of the physician who answered the questionnaire works in University Hospitals (67/102; 65.7%), 22 out of 102 (21.6%) in non-academic Hospitals, and the remaining 12.7% in territorial outpatient clinics.

When asked if they usually evaluate CV risk in patients with autoimmune rheumatic diseases, 67/102 (67.2%) answered positively, 18 no (17.6%) and 7 did not answer the question; 82% of those who routinely assess the CV do it by themselves. The barriers limiting the assessment of CV risk included: i) lack of time (79%); ii) complex management (12%); inadequate training (9%).

As for the CV risk factors, lipid profile, hypertension and diabetes are assessed by most of the rheumatologists (90%, 89% and 88%, respectively), family history by 78% and body mass index by 75.3% and waist circumference only by 25% of those who completed the survey.

Finally, only 18.6% stated that they manage by themselves CV risk in patients with autoimmune rheumatic diseases while 50% refer patients to other specialists and 23.4% to general practitioner.

Conclusion: Despite the growing awareness on the CV risk characterizing patients with autoimmune rheumatic disease, about one third of young Italian rheumatologists does not strictly adhere to the EULAR recommendations on CV management, mostly due to insufficient time during the routine care visits.

References:

[1] Agca R et al. Ann Rheum Dis 2017; 76: 17-28.

Disclosure of Interests: Francesca Romana Spinelli Grant/research support from: Pfizer, Speakers bureau: Lilly, BMS, Celgene, Fabio Cacciapaglia Speakers bureau: BMS; Roche; Pfizer; Abbvie, Fabiola Atzeni: None declared, Gianluca Erre: None declared, Andreina Manfredi: None declared, Elena Bartoloni Bocchi: None declared, Matteo Piga: None declared, Garifallia Sakellariou Speakers bureau: Abbvie, Novartis, MSD, Ombretta Viapiana: None declared, Elisa Gremese Speakers bureau: Abbvie, BMS, Celgene, Janssen, Lilly, MSD, Novartis, Pfizer, Sandoz, UCB

DOI: 10.1136/annrheumdis-2020-eular.6093

SAT0093

CDAI AND DAS28 IN THE MANAGEMENT OF RHEUMATOID ARTHRITIS IN CLINICAL PRACTICE

S. Takanashi¹, Y. Kaneko¹, T. Takeuchi¹. ¹Keio University School of Medicine, Division of Rheumatology, Department of Internal Medicine, Tokyo, Japan

Background: The primary therapeutic target for rheumatoid arthritis (RA) is remission, assessed using validated composited measures. Currently, index-based remission frequently used in clinical practice are disease activity (CDAI) and disease activity score for 28 joints (DAS28). Generally, CDAI is believed

more stringent than DAS28 in assessing clinical remission, however, this confirmation was mainly derived from trial results.

Objectives: To investigate the real-world performance of CDAI and DAS28-erythrocyte sedimentation rate (ESR) in RA.

Methods: We reviewed consecutive RA patients who are receiving any disease modifying anti-rheumatic drug (DMARDs) in Keio University Hospital between 2016 and 2017 and collected medical information. We focused on the patients in CDAI remission and/or DAS28-ESR remission at the time of last visit, and analyzed their clinical characteristics.

Results: A total of 1585 patients with RA were reviewed. Their characteristics were mean age of 64 years old, female of 84% and mean disease duration of 12.0 years. Current treatments were conventional synthetic (cs) DMARDs alone, TNF inhibitors (TNFi), IL-6 receptor inhibitors (IL-6i), CTLA-4Ig, and JAK inhibitors (JAKi) in 39.2%, 29.0%, 22.8%, 7.1%, and 1.8% patients, respectively. Of them, 62.7% were in CDAI remission and 64% were in DAS28-ESR remission. Among patients in CDAI remission, the proportion of DAS28-ESR non-remission was 19.4% in those treated with csDMARDs, 18.2% treated with TNFi, 4.2% treated with IL-6i, 27.6% treated with CTLA-4Ig, and 33.3% treated with JAKi (Figure). In contrast, among patients in DAS28 remission, the proportion of CDAI non-remission was 11.7% in those treated with csDMARDs, 15.4% treated with TNFi, 29.5% treated with IL-6i, 16.0% treated with CTLA-4Ig, and 14.3% treated with JAKi. Venn diagrams of CDAI remission and DAS28-ESR remission demonstrated that more patients satisfied the CDAI remission criteria without satisfying the DAS28-ESR remission criteria than vice versa, except for those treated with IL-6i (Figure). Patients in CDAI remission and DAS28-ESR non-remission had higher C-reactive protein, ESR and comorbidity rates (0.37 vs 0.07 mg/dL, p<0.001; 45.7 vs 8.0 mm/h, p<0.001; 26.4 vs 18.0%, p=0.07, respectively), and those in CDAI non-remission and DAS28-ESR remission had worse patient-reported outcomes including patient global assessment and health assessment questionnaire-disability index (31.1 vs 9.5 mm, p<0.001; 0.82 vs 0.41, p<0.001, respectively). Patients in both CDAI and DAS28-ESR remission were apparently in better disease activity than those who met either criteria.

Conclusion: Assessing patients with two composite measures simultaneously is important to evaluate patients' condition from view points of RA itself and comorbidities and adjust treatment appropriately.

References:

[1] Smolen JS et al. T2T Expert Committee. Treating rheumatoid arthritis to target: recommendations of an international task force. Ann Rheum Dis. 2010;69(4):631-7.

Disclosure of Interests: Satoshi Takanashi: None declared, Yuko Kaneko Speakers bureau: Dr. Kaneko reports personal fees from AbbVie, personal fees from Astellas, personal fees from Ayumi, personal fees from Bristol-Myers Squibb, personal fees from Chugai, personal fees from Eisai, personal fees from Eli Lilly, personal fees from Hisamitsu, personal fees from Jansen, personal fees from Kissei, personal fees from Pfizer, personal fees from Sanofi, personal fees from Takeda, personal fees from Tanabe-Mitsubishi, personal fees from UCB, Tsutomu Takeuchi Grant/research support from: Eisai Co., Ltd, Astellas Pharma Inc., AbbVie GK, Asahi Kasei Pharma Corporation, Nippon Kayaku Co., Ltd, Takeda Pharmaceutical Company Ltd, UCB Pharma, Shionogi & Co., Ltd., Mitsubishi-Tanabe Pharma Corp., Daiichi Sankyo Co., Ltd., Chugai Pharmaceutical Co. Ltd., Consultant of: Chugai Pharmaceutical Co Ltd, Astellas Pharma Inc., Eli Lilly Japan KK, Speakers bureau: AbbVie GK, Eisai Co., Ltd, Mitsubishi-Tanabe Pharma Corporation, Chugai Pharmaceutical Co Ltd, Bristol-Myers Squibb Company, AYUMI Pharmaceutical Corp., Eisai Co., Ltd, Daiichi Sankyo Co., Ltd., Gilead Sciences, Inc., Novartis Pharma K.K., Pfizer Japan Inc., Sanofi K.K., Daiippon Sumitomo Co., Ltd.

DOI: 10.1136/annrheumdis-2020-eular.1377

SAT0094

ASSESSMENT OF BONE MINERAL DENSITY AND FRACTURE RISK IN PATIENTS WITH RHEUMATOID ARTHRITIS AND SARCOPENIA

O. Dobrovolskaya¹, Z. Kolkhidova¹, A. Menshikova¹, N. Demin¹, N. Toroptsova¹. ¹V.A. Nasonova Scientific and Research Institute of Rheumatology, Moscow, Russian Federation

Background: The problem of sarcopenia (SP) in rheumatoid arthritis (RA) is particularly significant in terms of assessing the risk of fractures, since SP leads to falls, which are an independent risk factor for fractures along with RA and osteoporosis.

Objectives: To evaluate the bone mineral density (BMD) and fracture risk in women with RA and SP.

Methods: 79 women with RA based on the 2010 ACR/EULAR classification criteria were included: 20 (25%) women with confirmed SP (age median 59 [53; 64]) according to EWGSOP2 criteria and 59 (75%) women without SP (age median 60 [55; 67]) ($p>0.05$). We assessed clinical data: age, body mass index (BMI), disease duration, anthropometric measurements, C-reactive protein level, disease activity score in 28 joints-erythrocyte sedimentation rate (DAS28-ESR), previous medication use including glucocorticoids and methotrexate, muscle strength and function. Dual-energy X-ray absorptiometry (DXA) to measure BMD of lumbar spine (LS), femoral neck (FN) and total hip (TH) was performed. The 10-year probability of major osteoporotic fracture (clinical spine, forearm, hip or shoulder fracture) and the 10-year probability hip fracture was calculated using the Russian version of the FRAX® tool. Statistical analysis was performed using non-parametric methods. All patients signed an informed consent to participate.

Results: Median BMD in LS was 0.892 [0.772; 1.024] g/cm² in patients with SP and 0.910 [0.785; 1.028] g/cm² - without SP ($p>0.05$). There was significant difference between groups in the proximal femur BMD: 0.760 [0.731; 0.826] g/cm² in TH and 0.681 [0.607; 0.703] g/cm² in FN in patients with SP and 0.838 [0.735; 0.921] g/cm² in TH and 0.719 [0.622; 0.804] g/cm² in FN in patients without SP ($p=0.009$ and $p=0.048$, respectively). The frequency of osteoporosis was 35% and 22% in patients with and without SP ($p>0.05$). The 10-year probability of major osteoporotic fracture with / without femoral neck BMD data was 22.0% [17.0; 32.0] / 19.5% [18.5; 22.5 and 13.3% [9.8; 18.5] / 12.8% [9.3; 17.0] in patients with SP and without SP ($p<0.05$) and the 10-year probability of hip fracture with / without femoral neck BMD data - 3.1% [3.0; 7.5] / 3.1% [2.3; 3.3] and 1.4% [0.9; 2.78] / 0.65 [0.4; 1.7], respectively ($p<0.05$).

Conclusion: There were no differences in the frequency of osteoporosis between patients with SP and without SP, however women with SP had proximal femur BMD less than women without SP. The probability of major osteoporotic fracture and hip fracture was significantly higher in patients with RA and SP compared with patients without SP.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.3066

SAT0095

REAL LIFE SEVERE INFECTIONS IN PATIENTS WITH RHEUMATOID ARTHRITIS ON TREATMENT WITH BIOLOGICAL THERAPY AND JAKI

L. Vega¹, I. Calvo¹, O. Ibarguengoitia¹, J. M. Blanco¹, D. Montero¹, C. García¹, M. E. Ruiz¹, A. R. Inchaurre¹, I. Torre¹, C. E. Perez¹, O. Fernandez¹, E. Cuande¹, I. Gorostiza², M. L. García Vivar¹, E. Galindez¹. ¹Basurto University Hospital, Rheumatology, Bilbao, Spain; ²Basurto University Hospital, Investigation, Bilbao, Spain

Background: Infections are one of the main complications among patients with rheumatoid arthritis (RA) with immunosuppressive treatment. The differences between treatments and the influence of other factors is unclear.

Objectives: To evaluate the frequency and factors associated with serious infections in patients with RA treated with biological therapy (BT) and JAKi and the differences between treatments.

Methods: Descriptive and retrospective study (January 2015-December 2019) of patients with RA treated with BT (TNFi, non-TNFi) and JAKi (tofacitinib, baricitinib) in a single center. Severe infection was considered a life-threatening infection or one that required hospitalization and intravenous treatment. Epidemiological variables, clinical characteristics, Charlson comorbidity index, type of BT or JAKi and concomitant treatment were collected.

For the analysis frequencies and percentages are used in qualitative variables, and mean $\pm$ SD in the quantitative ones. Statistical analysis was performed with IBM SPSS v 23.

Results: We registered 246 patients (85% women) mean aged 55.8 $\pm$ 13.5 years. RF was positive in 87%, anti-CCP in 75.6% and 15.4 % presented extra-articular manifestations (nodulosis 8.9%, interstitial lung disease 5.3%, other 1.2%). At the start of the study 149 patients (60.6%) were with TNFi, 79 (32.1%) non-TNFi and 18 (7.3%) with JAKi and non-biologic DMARD (nbDMARDs) were used in 84.1% of cases (methotrexate 71.2%, leflunomide 21.4%, other 7.4%). During the study 176 patients (71.5%) continued with the same treatment and in 70 (28.5%) it was changed at least once. 5 patients discontinued the treatment. At the end of the study, 124 patients (50.4%) were with TNFi, 83 (33.7%) non-TNFi and 34 (13.8%) with JAKi.

Severe infection was developed in 17 (6.9%) patients (respiratory 7, se sis 4, urinary 3, cellulitis 2, osteomyelitis 1) among them 2 patients had severe infection and herpes zoster and 3 developed a second infection. 9 patients were with TNFi (52.9%), 6 non- TNFi BT (35.3%) and 2 JAKi (11.8%). Table 1

TABLE 1. CHARACTERISTICS OF PATIENTS WITH INFECTION VS. WITHOUT INFECTION

	INFECTION		p
	YES n:17	NO n:229	
FEMALE , n (%)	13 (76.5)	196 (85.6)	0.297
AGE years , (mean $\pm$ SD)	60.8 $\pm$ 13	55.4 $\pm$ 13.5	0.112
AGE $\geq$ 65 n (%)	9 (52.9)	63 (27.5)	0.070
RF + , n (%)	17 (100)	197 (86)	0.139
ANTI-CCP + , n (%)	14 (82.4)	172 (75.1)	0.770
ILD , n (%)	1 (25)	12 (35.3)	0.708
ALCOHOL , n (%)	1 (5.9)	19 (8.3)	1.00
SMOKER , n (%)	5 (29.4)	60 (26.2)	0.772
COPD , n (%)	5 (29.4)	24 (10.5)	0.036*
DM , n (%)	7 (41.2)	19 (8.3)	0.001*
SEVERE LIVER DISEASE , n (%)	2 (11.8)	1 (0.4)	0.013*
RENAL INSUFFICIENCY , n (%)	2 (11.8)	3 (1.3)	0.040*
PERIPHERAL VASCULAR DISEASE , n (%)	7 (41.2)	25 (10.9)	0.003*
CHARLSON INDEX (mean $\pm$ SD)	2.35 $\pm$ 2.1	0.66 $\pm$ 1.2	0.014*
TNFi , n (%)	9 (52.9)	115 (50.2)	
NON-TNFi n (%)	6 (35.3)	77 (33.6)	
JAKi , n (%)	2 (11.8)	32 (14)	
nbDMARDs , n (%)	12 (70.6)	156 (68.1)	0.833
GCC , n (%)	13 (76.5)	115 (50.2)	0.037*

The inflammatory activity of RA was mild at the time of infection (DAS28: 2.7 $\pm$ 1.2). The median time until infection was: TNFi 28.05 months, non- TNFi BT 25.03 and Jakinibs 16.97.

The Charlson index, concomitant treatment with glucocorticoids (GCC) (not treatment with nbDMARDs), chronic obstructive pulmonary disease (COPD), diabetes (DM), severe liver disease and moderate-severe renal insufficiency were statistically significantly associated with infection. Table 1

Conclusion: In our study, 6.9% of patients with RA treated with BT or JAKi developed severe infection during 4 years of follow-up. Concomitant GCC therapy and comorbidity increased the risk of presenting this complication.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2020-eular.3691

SAT0096

DISCORDANCE BETWEEN SUBJECTIVE AND OBJECTIVE INDEX OF THE DISEASE ACTIVITY SCORE MAY REDUCE THE CORRELATION BETWEEN CLINICAL AND ULTRASOUND ASSESSMENT IN RHEUMATOID ARTHRITIS

A. Xie¹, L. Ji¹, Z. Zhang¹. ¹Peking University First Hospital, Rheumatology and Clinical Immunology, Beijing, China

Background: There was discordance between subjective and objective index of the disease activity score, or between clinical parameters and ultrasound findings in some RA patients. Therefore, we set out to determine whether the discordance between subjective and objective index of the composite score could reduce the correlation between clinical and ultrasound parameters in RA.

Objectives: To investigate whether the discordance between tender and swollen joint count (TJC and SJC) as well as patient's and evaluator's global assessment (PGA and EGA) influences the correlation between clinical and US parameters in RA.

Methods: RA patients with available ultrasonography of 28 joints from Jan 2014 to Jan 2018 were enrolled in the study. Gray-scale (GS) synovial hypertrophy and Power Doppler (PD) synovitis were measured and semi-quantitatively graded. The total GS/PD score was the sum score of 28 joints. SJC and TJC based on 28 joints, PGA and EGA of all the patients were evaluated by one rheumatologist. The numeric difference between TJC and SJC (Δ TJSJ) and that between PGA and EGA (Δ PEG) were calculated. The correlation between clinical and ultrasound parameters in different Δ TJSJ and Δ PEG subgroups was explored.

Results: Totally 163 patients were enrolled in the study. Clinical composite disease activity scores and all the components were significantly correlated with the total GS and PD scores ($p<0.01$ for all). But the relevance between the clinical disease parameters and total PD score became weak, with the increase of Δ TJSJ. For the patients with Δ TJSJ > 5 , the total PD score was only correlated with CRP, EGA and PGA, while the total GS score was only correlated with CRP. Similarly, no correlation between total PD score and clinical parameters, except for SJC, was observed in patients with Δ PEG < 0 ($p < 0.05$).

Conclusion: Total PD/GS score was correlated well with the clinical parameters of disease activity, including both the subjective and objective indexes. But for patients with Δ TJSJ > 5 , there was no correlation between total GS/PD scores and clinical composite disease activity scores, except that only the objective index (CRP, SJC and EGA) were more likely to correlate with total GS/PD scores.