AB0332

COMORBIDITIES PREVALENCE AND CHARLSON INDEX IN A COHORT OF PATIENTS WITH RHEUMATOID ARTHRITIS

A.B. Azuaga-Piñango, R. Castellanos-Moreira, S.C. Rodriguez-Garcia, S. Mandelkova, B. Frade-Sosa, A. Diaz-Castillo, N. Sapena, C. Gonzalez-Delaurens, V. Ruiz-Esquivel, O. Camacho, A. Cuervo, J. Ramirez, M. V. Hernandez, J.A. Gómez Puerta, J.D. Cañete, R. Sanmarti. *Rheumatology, Hospital Clinic de Barcelona, Barcelona, Spain*

Background: The Charlson comorbidity index (CCI) is a prognostic scale, which gives a numerical value that indicates the burden of comorbidities in a patient. This index is obtained from the sum of 19 medical conditions that have been related to mortality and has been validated in several studies. Patients with rheumatoid arthritis (RA) are more at risk than the general population of developing comorbidities. However, these often go unnoticed despite the impact on the disease activity and to treatment response, as shown by different studies such as COMORA.

Objectives: To determine the prevalence of comorbidities in a cohort of patients with RA and estimate CCI.

Methods: Cross-sectional descriptive study, patients diagnosed with RA according to the EULAR/ACR 2010 classification criteria were included. All patients were followed up in a rheumatology service in a tertiary hospital. Comorbidities were obtained from the medical records. To measure comorbidities, CCI was calculated, the diagnosis of RA was not included in the index. We defined three categories of comorbidity according to CCI: 0 (no comorbidity, applied to patients with no previous record of conditions included in the CCI), 1 to 2 (moderate) and 3 or more (severe). Others comorbidities not included in CCI, such as hypertension (HTN), dyslipidemias (DLP), thyroid disease (TD), osteoporosis (OP) were collected.

Results: 130 patients (103 women) were analysed; mean age was 58.6±12.9 years and disease duration of 6.0±4.4 years. 82.8% were seropositive for rheumatoid factor (n: 83) and/or anti-CCP (n: 97). 44.6% had previous smoking history, 22 were current smokers. The most observed comorbidities in our cohort were: overweight and obesity (BMI ≥25; 63%), DLP (38.8%), HTN (31.5%), chronic kidney disease (32.3%; 6.9% ≥Stage III) and chronic lung disease (23.8%). Other diseases included TD (18.5%), OP (17.7%), diabetes mellitus (9.2%) and liver disease (9.2%). Five patients with a history of tumour (2 metastases) and 2 lymphomas in the last 5 years. Four patients had a heart disease, in 3 as an ischaemic event.

According to CCI, 20.8% of the patients had a Charlson 0, 43.8% Charlson 1–2, and 35.4% Charlson ≥3.

Conclusions: In our cohort, despite being a relatively young population, the presence of comorbidities and cardiovascular risk factors is relatively high, in agreement with what has been observed in other studies. 1 out of 3 patients has a severe comorbidity burden.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3216

AB0333

ANALYSIS OF THE ASSOCIATION OF COMPOUND INDICATES OF DISEASE ACTIVITY AND QUALIFICATIONS OF FUNCTIONAL CAPACITY AND QUALITY OF LIFE RELATED TO HEALTH IN PATIENTS WITH RHEUMATOID ARTHRITIS

B.F. Althoff¹, I.A. Pereira¹, T. Fontana¹, Y. Alfaro², C.J. Ferreira¹. ¹Medicina; ²Universidade do Sul de Santa Catarina, Florianópolis, Brazil

Background: The correlation analysis of ICADs with questionnaires of functional evaluation and quality of life is essential, since it is the outcomes that matter to the patients.

Objectives: To evaluate the correlations between ICADs with questionnaires of functional capacity (HAQ) and health-related life quality (SF12).

Methods: Cross-sectional study with 100 out-patients of Santa Catarina, participants of a multicenter cohort, followed between August 2015/January 2016. Evaluated ICADs were: DAS-28 VHS, DAS-28 PCR, SDAI, CDAI, RADAI. The questionnaires were: HAQ and SF12. Tests Qui Square, test t Student, prevalence ratio and Pearson's correlation were used, with reliability interval 95%. Approved by Ethics Committee in Research of UNISUL.

Results: Moderate correlation between ICADs and HAQ (variation r 0,52–0,65). Weak correlation between ICADs and SF12 (Physical: variation r 0,15–0,24 and Mental: variation r 0,40–0,45).

Abstract AB0333 – Tabel 1. Correlation between Laboratory Parameters and Functional Capacity (HAQ) in patients with Rheumatoid Arthritis of Santa Catarina.

Variables	HAQ*
ESR† (mm/1 ^h)	0,238
CRP‡ (mg/dl)	0,287
DAS-28§ ESR	0,580
DAS-28 CRP	0,551
SDAI	0,524
CDAI ¶	0,524
RADAI**	0,655

*Health Assessment Questionnaire † Erythrocyte Sedimentation Rate ‡ C-Reactive Protein § Disease Activity Score-28 || Simplified disease activity index ¶ Clinical disease activity index **Rheumatoid arthritis disease activity.

Source: Elaboration of the author, 2017.

Conclusions: ICADs correlate poorly with quality of life, assessed by SF12, but moderately with functional limitation, assessed by HAQ.

REFERENCES:

- Medeiros MMC, Oliveira BMGB, Cerqueira JVM, Quixadá RTS, Oliveira IMX. Correlação dos índices de atividade da artrite reumatoide (DAS-28 VHS, DAS28-PCR, SDAI, CDAI) e concordância dos estados de atividade da doença com vários pontos de corte numa população do nordeste brasileiro. *Rev Bras Reumatol* 2015;55(6):477–84.
- Oliveira LM, Natour J, Roizenblatt S, Araujo PMP, Ferraz MB. Acompanhamento da capacidade funcional de pacientes com artrite reumatoide por três anos. *Rev Bras Reumatol* 2015;55(1):62–7.
- Marques WV, Cruz V A, Rego J, Silva NA. Influência das comorbidades na capacidade funcional de pacientes com artrite reumatoide. *Rev Bras Reumatol* 2016;56(1):14–21.
- Radner H, Smolen JS, Aletaha D. Remission in rheumatoid arthritis: benefit over low disease activity in patient-reported outcomes and costs. *Arthritis Res Ther* 2014;16:R56.
- Radner H, Smolen JS, Aletaha D. Comorbidity affects all domains of physical function and quality of life in patients with rheumatoid arthritis. *Rheumatology* 2011;50:381–8.
- Yang G, Bykerk VP, Boire G, Hitchon CA, Thorne C, et al. Does socioeconomic status affect outcomes in early inflammatory arthritis? Data from a Canadian Multisite Suspected Rheumatoid Arthritis Inception cohort. *J Rheumatol* 2015;42(1):46–54.
- Mota LM, Cruz BA, Brenol CV, Pereira IA, Fronza LSR, et al. Guidelines for the diagnosis of rheumatoid arthritis. *Rev Bras Reumatol* 2013;53(2):141–57.
- Dritsaki M, Petrou S, Williams M, Lamb SE. An empirical evaluation of the SF-12, SF-6D, EQ-5D and Michigan Hand Outcome Questionnaire in patients with rheumatoid arthritis of the hand. *Health Qual Life Outcomes* 2017;15(20):2–11.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3933

AB0334

NEOPLASM RISK IN A RHEUMATOID ARTHRITIS COHORT: A RETROSPECTIVE STUDY

C. Ambrósio, A. Barcelos. *Rheumatology, Hospital Infante D. Pedro-Aveiro, Aveiro, Portugal*

Background: It is well known that the risk of neoplasms is increased in rheumatic patients, especially in Rheumatoid Arthritis (RA), SLE and inflammatory myopathies. Although the relationship between neoplasms and some factors involving the pathophysiology and immunomodulatory therapy of this diseases is well known, we still don't know all the mechanisms underlying this process. Thereby, this theme has been of ongoing interest and research.

Objectives: To determine whether the incidence of neoplasm is increased in patients with RA compared to a matched comparison cohort and to identify risk for any individual malignancy in RA.

Methods: A cohort of 243 RA patients, who fulfilled 1987 ACR criteria for RA and a comparison cohort, sex and age matched without RA (non-RA) were evaluated retrospectively for cancer occurrence. Demographic, epidemiological, clinical, laboratorial and imaging data were collected through medical record review. All paraneoplastic cases were excluded. Descriptive statistics were used to summarise data of the RA and comparator group.

Results: 243 RA patients (mean age 62,9 y, 68,7% female, mean disease duration 10,6 y) were enrolled. 148 RA patients had rheumatoid factor (RF) present

and 120 had anti-citrullinated peptide (anti-ccp) positive. Erosions were present in 106 RA patients. The prevalence of neoplasms was similar in RA and non-RA groups ($n=24$ vs 23 , $p=0.8$) and 5 of the deaths occurred in the RA-neoplasm group were due to the cancer. Of the 24 neoplasms in RA group, 9 appeared after the RA diagnosis was established (mean 10 years) and 17 before (mean 9.65 years). In RA patients correlation was found between male sex and neoplasm ($p=0.04$) as well as absence of RF rheumatoid factor and neoplasm ($p=0.049$). No correlation was found between the presence of neoplasm and anti ccp presence or erosions ($p=0.3$ and $p=0.51$ respectively). In this study, the overall risk of neoplasms in patients with RA was not associated with conventional or biological DMARDs. No differences were found between the type of tumour in RA patients vs non-RA, except for colon cancer, more prevalent in RA patients ($p=0.03$). Only 21 non-RA patients vs 19 RA patients were smokers and for so, it wasn't possible to establish any correlations.

Conclusions: In this study we found a prevalence of colon cancer in RA patients, as was found in other studies whoever, the increased risk for lung cancer and lymphoma often reported, was not found. It seems that male sex and the absence of rheumatoid factor are responsible for an increased risk. However we have several limitations: a very small sample, the population of the study was predominately Caucasian. Further studies examining specific aspects such as treatments, smoking or other lifestyle factors are needed to investigate the underlying mechanisms for the increased or decreased risk of specific cancers observed in patients with RA compared with the general population.

REFERENCES:

- [1] Raheel S, Crowson CS, Wright K, Matteson EL. Risk of malignant neoplasm in patients with incident Rheumatoid Arthritis 1980–2007 in relation to a comparator cohort: a population based study. *Int J Rheumatol* 2016; (8):1–6.
- [2] Simon TA, et al. Incidence of malignancy in adult patients with rheumatoid arthritis: a meta-analysis. *Arthritis Res Ther* 2015;1(17):212.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.1788

AB0335

ARE EULAR RHEUMATOID ARTHRITIS (RA) MANAGEMENT RECOMMENDATIONS APPLICABLE AT THE COUNTRY LEVEL? SIMILARITIES AND DIFFERENCES WITH THE RECENT FRENCH RA MANAGEMENT RECOMMENDATIONS

C. Hua^{1,2}, C. Daïen², C. Gaujoux-Viala^{1,2}, A. Cantagrel², M. Dubremetz², M. Dougados², B. Fautrel², X. Mariette², N. Nayral², C. Richez², A. Saraux², G. Thibaud², D. Wendling², L. Gossec², B. Combe². ¹Nîmes University hospital, EA2415, Montpellier University, Nîmes; ²SFR Recommendations Working Group, Paris, France

Background: Recently, EULAR updated the rheumatoid arthritis (RA) management recommendations.^{1,2} In 2018, the French Society of Rheumatology (SFR) updated their recommendations regarding the management of RA.³ This gave us the opportunity to compare the recommendations.

Objectives: To update the 2014 French recommendations for the management of RA and to compare them to the EULAR recommendations.

Methods: The SFR approach was based on the literature and on expert opinion. A systematic literature review (SLR) was performed by 2 fellows, collecting data to answer 11 questions. The previous (2014) recommendations were updated by a committee including 11 rheumatologists, 2 patients and 1 healthcare professional, during a 1 day meeting in January 2018. The recommendations were compared to the recently issued EULAR recommendations.^{1,2}

Results: The SLR included 137 papers. The consensus process led to 4 overarching principles and 15 recommendations. The overarching principles emphasise the need for shared decisions between the rheumatologists and the patient and the importance of a global approach of RA including pharmaceutical and non-pharmacological management. The recommendations address the diagnostic phase of RA, early initiation of disease-modifying antirheumatic drugs (DMARDs) and the usefulness of regular disease activity assessments through validated composite indices with a target of clinical remission or low disease activity. As first strategy, the expert committee recommends methotrexate (MTX). In case of intolerance or inadequate response to MTX, treatment must be optimised. If unfavourable prognostic markers are present, adding a targeted treatment (either biologic or synthetic) can be proposed, at best in combination with MTX; if not, switching to another conventional synthetic DMARD (csDMARD) or combined csDMARDs therapy can be proposed. While waiting for csDMARDs efficacy, short term (less than 6 months) glucocorticoids (GC) can be proposed. Second-line and further treatments and management of remission are also addressed, as well as the importance of managing comorbidities and of non-pharmacological measures.

Conclusions: These recommendations are designed to improve the management of RA and are concordant with the recent EULAR recommendations on several items. Main differences concern the place of GC and of combined csDMARD therapy, as well as additional points on diagnosis, non-pharmacological measures, comorbidities and the importance of a global approach.

REFERENCES:

- [1] Smolen JS, Landewé R, Bijlsma J, et al. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2016 update. *Ann Rheum Dis* 2017;76 (6):960–77.
- [2] Combe B, Landewe R, Daïen CI, et al. 2016 update of the EULAR recommendations for the management of early arthritis. *Ann Rheum Dis* 2017;76 (6):948–59.
- [3] Gaujoux-Viala C, Gossec L, Cantagrel A, et al. Recommendations of the French Society for Rheumatology for managing rheumatoid arthritis. *Jt Bone Spine Rev Rhum* 2014;81(4):287–97.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.2268

AB0336

HEPATITIS B VIRUS REACTIVATION IN RHEUMATOID ARTHRITIS PATIENTS WITH HBSAG-NEGATIVE/ANTI-HBC-POSITIVE STATUS

C.-H. Ho¹, M.H.A. Leung². ¹Department of Medicine; ²Queen Elizabeth Hospital, Kowloon, Hong Kong

Background: Hepatitis B virus (HBV) reactivation in rheumatoid arthritis (RA) patients with positive hepatitis B surface antigen (HBsAg+) is one of the treatment-related complications. The risk of reactivation in patients with negative hepatitis B surface antigen but positive anti-hepatitis B core antibody (HBsAg-/anti-HBc+) is less well defined compared to their HBsAg+ counterparts.

Objectives: This retrospective, single centre study aimed to study the prevalence of HBV reactivation (defined as HBV DNA becoming detectable) among RA patients with HBsAg-/anti-HBc+ status, and to investigate any factors predicting reactivation.

Methods: RA patients attending the rheumatology specialist clinic in a local tertiary hospital between 1st January 2011 and 31st December 2016 were included if they had of¹ HBsAg-/anti-HBc+ status and² undetectable HBV DNA at baseline. Demographic data, clinical parameters including treatments for RA and any use of antiviral prophylaxis, and laboratory results including anti-hepatitis B surface antibody (anti-HBs) and serial HBV DNA levels were obtained. Chi-square (or Fisher exact test if number was less than 5) was used for analysis of categorical variables. Student's t-test and Mann Whitney test were used for analysis of parametric and non-parametric continuous variables respectively.

Results: Majority (80%) of the 107 included patients included were female and the mean age was 62.5-year-old (SD 12.09). All the patients were receiving disease modifying anti-rheumatic drugs (DMARDs), 43% of which ($n=46$) were on biological therapy (with or without concomitant synthetic DMARDs) and the remaining ($n=61$) were only on conventional synthetic DMARDs (8 on monotherapy, 53 on combination therapy). As antiviral prophylaxis was not mandatory in HBsAg-/anti-HBc+ patients according to local guideline, only 13 patients (12.1%) were on antiviral cover (12 on entecavir and 1 on lamivudine).

Ten patients (9.3%) experienced HBV reactivation during their disease course. Three of them were on antiviral prophylaxis and four had positive anti-HBs. All of these reactivations were only transient low-grade viraemia with HBV DNA level <20 IU/ml. Spontaneous resolution of viraemia in less than 12 months' time were observed in all of these patients. None of the reactivation resulted in any adverse clinical event including acute hepatitis, hepatic failure or mortality.

Among all synthetic and biological DMARDs, only the use of methotrexate was found to be a significant predictor of HBV reactivation ($p<0.05$). Other parameters including age, the lack of antiviral prophylaxis, negative anti-HBs status and anti-HBs titre did not predict HBV reactivation.

Conclusions: HBV reactivation among RA patients with HBsAg-/anti-HBc+ status and undetectable HBV DNA at baseline was infrequent. Reactivation may occur in patients with positive anti-HBs or on antiviral prophylaxis, but was unlikely to be associated with adverse clinical outcome. The use of methotrexate was a predictor of HBV reactivation in these patients.

REFERENCES:

- [1] *Mod Rheumatol* 2018 Jan 22:1–6.
- [2] *Clin Exp Rheumatol* 2017 Sep–Oct;35(5):831–836.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.7147