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AB0259

CLINICAL MANAGEMENT OF SERONEGATIVE AND SEROPOSITIVE RHEUMATOID ARTHRITIS: A COMPARATIVE STUDY

K. Lee¹, S.-T. Cho². ¹Dongguk University Ilsan Hospital, Goyang; ²Chung-Ang University College of Medicine, Seoul, Korea, Republic of Ireland

Background: Both rheumatoid factor (RF) and anti-cyclic citrullinated peptide antibody (ACPA) are associated with poor radiologic outcomes in patients with rheumatoid arthritis (RA). In general, RA patients positive for RF or ACPA (SPRA) are considered to manifest an aggressive disease course compared with seronegative RA patients (SNRA). However, the relationship between seropositivity and measures of disease severity other than radiologic outcome is disputed.

Objectives: In this study, we sought to compare the clinical presentations and treatment outcomes of SNRA and SPRA patients.

Methods: A total of 241 patients diagnosed with DMARD-naïve RA under either 1987 American College of Rheumatology (ACR) criteria or 2010 ACR/European League Against Rheumatism (EULAR) criteria were identified (40 with SNRA and 201 with SPRA). We investigated the disease activity measures including ESR, CRP, patient VAS, 28 tender/swollen joint count (28 TJC, 28 SJC) and DAS28 as well as radiologic outcomes at baseline, 1 and 2 years after conventional treatment with DMARD.

Results: Age, sex and disease duration were similar between SNRA and SPRA. However, the baseline 28 TJC (4.7 ± 2.9 vs. 3.3 ± 2.7 , $p=0.004$), 28 SJC (4.3 ± 3.0 vs. 2.9 ± 2.3 , $p=0.001$) and DAS28 (5.1 ± 1.0 vs. 4.7 ± 1.0 , $p=0.043$) components were significantly higher in SNRA than in SPRA. Over 2 years of similar treatment with DMARDs, all disease activity measures significantly improved in both groups. Notably, Δ DAS28 from baseline at 1 year was significantly greater in SNRA compared with SPRA (-2.9 ± 1.2 vs. -2.2 ± 1.8 , $p=0.002$). Radiologic outcomes at baseline and at 1- or 2 year follow-up were similar between the 2 groups.

Conclusions: SNRA patients manifested more active disease at baseline, but showed a better response to treatment compared with SPRA. SNRA does not appear to be a benign subtype of RA.

Disclosure of Interest: None declared

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AB0260

ASSOCIATION BETWEEN ANTI-CITRULLINATED PROTEIN ANTIBODY STATUS, EROSION DISEASE AND HEALTHCARE RESOURCE UTILISATION IN PATIENTS WITH RA

L.R. Harrold¹, L. Guo², S.E. Connolly³, E. Alemao³, S. Rebello², Y. Shan², J. M. Kremer⁴. ¹University of Massachusetts Medical School, Worcester, MA; ²Corona LLC, Waltham; ³Bristol-Myers Squibb, Princeton; ⁴Albany Medical College and The Center for Rheumatology, Albany, USA

Background: Anti-citrullinated protein antibody (ACPA) is a highly specific biomarker for RA¹ and ACPA-seropositive patients have a tendency toward severe erosive disease and more rapid disease progression.²⁻⁴ Little is known regarding the impact of poor prognostic factors, such as ACPA and erosive disease, on healthcare resource utilisation (HCRU).

Objectives: To characterise the rate of HCRU between anti-cyclic citrullinated peptide (anti-CCP; a surrogate of ACPA) positive (+) patients with or without erosions who initiated biologic (b)DMARD treatment.

Methods: This analysis included patients aged ≥ 18 years, who were enrolled in a large sequential RA registry (October 2001–August 2017) and who had known erosions, as measured by radiography, and anti-CCP +status at or prior to bDMARD initiation visit and a 12 month (± 3 months) follow-up visit. Anti-CCP +was defined as ≥ 20 U/mL. Rates of HCRU, including all-cause hospitalizations, all joint surgeries (total and partial; all sites), radiographic procedures and use of assistive devices, were estimated over 12 months of follow-up from the bDMARD initiation visit in anti-CCP +patients with or without erosions. Rates of HCRU per 100 patient-years and risk ratios, adjusted by baseline age, were estimated with 95% CI using a Poisson regression model.

Results: A total of 2047 anti-CCP +patients were included in this analysis, 868 with and 1179 without erosions. At biologic initiation visit, mean (SD) age was 58.9 (12.5) and 55.9 (12.5) years and disease duration was 11.7 (10.1) and 6.4 (7.5) years, respectively, in anti-CCP +patients with and without erosions. Over 12 months of follow-up, the rates of HCRU were higher among anti-CCP +patients with versus those without erosions at baseline bDMARD initiation visit (table 1).

Conclusions: ACPA seropositivity with erosive disease predicts high utilisation of healthcare resources, suggesting that early therapeutic intervention may be

warranted in anti-CCP +patients to achieve better disease control and reduce the complications from RA.

Abstract AB0260 – Table 1. Age-Adjusted Rates (95%CI) of HCRU and Adjusted Risk Ratios in Anti-CCP+ Patients With RA With and Without Erosions

	Age-adjusted rate (95% CI)*†		Adjusted risk ratio (95% CI)*†
	Anti-CCP+and no erosions (n=1179)	Anti-CCP +and erosions (n=868)	
Hospitalisation, all cause	9.44 (7.77–11.37)	15.21 (12.72–18.05)	1.47 (1.14–1.90)
Joint surgery visits, all sites	3.74 (2.72–5.02)	5.34 (3.91–7.12)	1.31 (0.86–1.98)
Radiography, all cause	18.12 (15.77–20.72)	22.18 (19.14–25.56)	1.25 (1.03–1.53)
Assistive devices	60.65 (56.28–65.27)	73.03 (67.44–78.97)	1.12 (1.00–1.25)

*Rates per 100 patient-years with 95% CI based on Poisson distributed counts

†Adjusted for baseline age

‡Reference group: anti-CCP +and erosions

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AB0261

ONGOING GOOD RESPONSE WITH BIOLOGICS. DATA FROM THE AUSTRIAN BIOREGISTRY

M. Herold^{1,2}, G. Eichbauer-Sturm³, T. Nothnagel⁴, R. Puchner⁵, B. Rintelen⁴, P. Spellitz⁶, B.F. Leeb⁴, on behalf of BioReg Austria. ¹Department of Internal Medicine II, Innsbruck Medical University, Innsbruck; ²BioReg Austria, Vienna; ³Rheumatologist in private practice, Linz; ⁴2nd Department of Internal Medicine, Lower Austria State Hospital, Stockerau; ⁵Rheumatologist in private practice, Wels; ⁶Rheumazentrum Wien-Oberlaa, Vienna, Austria

Background: The goal for the treatment of rheumatoid arthritis (RA) should be remission or at least low disease activity. Using data of the Austrian biologic registry we evaluated disease activity in patients with RA and treated with biologics for more than six years.

Objectives: The aim of this evaluation was to elucidate long term disease activity in patients with RA who are treated with a biologic. We checked data at baseline and at control-visits every six months after inclusion in BioReg.

Methods: Data were extracted from the Austrian BioReg registry (<http://www.bio-reg.at>) which was initiated in 2009 to document patients treated with one of the biologics approved in Austria. Patients with ongoing biologic therapy as well as biologic-naïve patients starting biologic therapy can be included (baseline, BL). Further documentation is recommended about every 6 months (V2, V2 up to V12). Until September 2017, 2132 patients (1157 RA, 497 SpA, 401 PsA, 77 other diseases) have been documented.

Estimation of disease activity was done using DAS-28, RADAI-5, HAQ as well as ESR and CRP.

Results: DAS-28 (median values of BL; V2; V4; V10;V12) of our patients with RA are 3,30; 2,51; 2,33; 2,49; 2,58, the respective RADAI-5 values are 3,20; 2,20; 2,00; 2,00; 2,40 and values of HAQ are 0,75; 0,50; 0,50; 0,50; 0,63. Median values of inflammation's laboratory markers (ESR in mm/1st hour and CRP in mg/l) were always within or close to the normal range (ESR and CRP in RA 15; 12; 11,5; 13,5; 11 and 2,1; 2,0; 2,0; 2,4; 3,0).

Conclusions: Our data confirm the efficiency of therapy with a biologic. During 6 years of continuous treatment more than half of the patients with RA are continuously in remission or low disease activity with a DAS-28 below 2,6, RADAI-5 equal or below to 2,40 and normal values of ESR and CRP.