adherent patients tend to perceive a worse disease condition. Further studies can clarify if low adherence is causally associated with less efficacy of therapy.

REFERENCES

- [1] Hughes, et al. BMC Musculoskeletal Disorders 2013; 14:286. 2. Morisky DE, et al. J Clin Hypertens 2008; 10:348–354.

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AB0360E SLEEP DISORDER OR DEPRESSION IN KOREAN RHEUMATOID ARTHRITIS, AND ITS ASSOCIATION WITH DISEASE ACTIVITY

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Background: Rheumatoid arthritis is a chronic autoimmune disease. Psychological stress and mood disorders such as sleep disorder or depression are more frequent in patient with RA.

Objectives: The aim of this study was to evaluate the relationship between disease activities and sleep disorder or depression in Korean patients with RA.

Methods: The study enrolled 334 patients with RA who visited Hallym University Sacred Heart Hospital (South Korea). The diagnosis of insomnia and depression is based in patient questionnaire such as Pittsburgh sleep quality index (PSQI) and Beck depression inventory (BDI). Insomnia was defined as PSQI > 5 and depression was defined as BDI ≥ 13. Patients were divided into two groups (insomnia vs no-insomnia, depression vs no-depression) and the clinical aspects were compared by Mann-Whitney U-test. Age, gender, erythrocyte sedimentation rate (ESR), 28 joint disease activity score (DAS28), DAS28-P score (the subjective components of the DAS28 relative to the total components), tender joint count (TJC) and swollen joint count (SJC), quality of life measured with health assessment questionnaire (HAQ) were analyzed.

Results: The median (inter-quartile range) disease duration was 6 (4–9) years and the mean DAS28 score was 3.6 ± 1.1 . Seventy percent of the patient had insomnia and 8% had depression. Compared with patients without insomnia, insomnia patients had a higher DAS28 (3.7 ± 1.16 vs. 3.21 ± 1.0 , $P < 0.001$), higher pain DAS28-P (0.37 ± 0.17 vs. 0.32 ± 0.16 , $P = 0.004$), higher TJC (6.59 ± 5.68 vs. 2.38 ± 3.45 , $P < 0.001$) and higher HAQ score (0.49 ± 0.53 vs. 0.18 ± 0.36 , $P < 0.001$). Compared with no depression patients, depression patients had a higher DAS28 (4.07 ± 1.37 vs. 3.51 ± 1.11 , $P < 0.001$), higher pain DAS28-P (0.44 ± 0.17 vs. 0.35 ± 0.44 , $P = 0.015$), higher TJC (6.59 ± 5.67 vs. 3.71 ± 5.02 , $P = 0.006$), higher SJC (1.81 ± 5.2 vs. 0.67 ± 1.28 , $P = 0.003$), and higher HAQ score (0.63 ± 0.51 vs. 0.38 ± 0.5 , $P = 0.021$).

On univariable logistic regression analysis, insomnia was positively associated with age, DAS28, DAS28-P and BDI score. After adjustment, insomnia was positively associated with sex (female), age, BDI and DAS28 score. On univariable logistic regression analysis, depression was positively associated with PSQI, DAS28 and DAS28-P score. After adjustment, depression was positively associated with PSQI and DAS28-P score.

Conclusion: Rheumatoid arthritis patient with the sleep disorder or depression had worse clinical symptoms than those without. Rheumatologist should take sleep disorder or depression into consideration on evaluation of disease severity in RA patients.

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AB0360F GENDER DIFFERENCES IN CLINICAL CHARACTERISTICS AND COMORBIDITIES AND THEIR IMPACT ON CLINICAL OUTCOME IN KOREAN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is a chronic auto-immune disease that is more common to female than male. Gender-based differences in

clinical features, comorbidities, and disease outcomes have been fragmentarily described. However, systematic analysis focusing on gender differences in a large RA population is scarce.

Objectives: We aimed to elucidate gender differences in clinical characteristics and comorbidities and their potential impact on clinical outcome in a large Korean cohort of patients with RA.

Methods: A total of 5,376 RA patients were included from the KOREAN Observational study Network for Arthritis (KORONA) database. Each patient was examined at baseline and three consecutive years. RA disease activity, functional disability, and quality of life were assessed by disease activity score 28 (DAS28), health assessment questionnaire (HAQ) and EuroQoL-5D (EQ-5D), respectively. The subjective health-related outcomes including visual analog scale (VAS) scores for patient's and physician's global health, patient's pain, fatigue, and sleep disturbance were collected. Clinical characteristics and comorbidities at baseline were compared according to gender. Gender impacts on clinical outcome during the four years were analyzed using generalized estimating equations (GEE) models for repeated measures. In addition, the gender effect on achieving clinical remission was analyzed using Cox-proportional hazards regression.

Results: At baseline, females (n=4,574) were younger, more erosive, and had longer disease duration than male (n=802). Females showed significantly higher scores in DAS28, HAQ, EQ-5D, and VAS for all patients' health-related outcomes. In terms of comorbidities, the prevalence of male RA was significantly higher than that of female RA in most illnesses including interstitial lung disease, cardiovascular disease, diabetes and other pulmonary disease except for depression. In the GEE model, gender was found to significantly influence the rate of change of DAS28 ($p = 0.041$), and also independently associated with this outcome ($p < 0.001$) after adjusting for age, disease duration, and baseline DAS28. Females were associated with a reduced rate of achieving DAS28 remission (HR 0.41, 95% CI 0.28–0.58) compared to male.

Conclusion: In Korean patients with RA, most comorbidities were more prevalent in male than in female. But for RA-related health outcomes, the longitudinal change in disease activity and the rate of achieving clinical remission over time were found to be worse in female RA.

REFERENCES

- [1] Jawaheer D, Maranian P, Park G, Lahiff M, Amjadi SS, Paulus HE. Disease progression and treatment responses in a prospective DMARD-naïve seropositive early rheumatoid arthritis cohort: does gender matter? J Rheumatol 2010;37:2475–85
- [2] Aurrecoechea E, Llorca Díaz J, Díez Lizuain ML, McGwin G Jr, Calvo-Alen J. Gender-associated comorbidities in rheumatoid arthritis and their impact on outcome: data from GENIRA. Rheumatol Int 2017;37:479–85.

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AB0360G DETECTABLE HBV DNA AT TREATMENT BASELINE PREDICTED HEPATITIS B VIRUS REACTIVATION IN INFLAMMATORY ARTHRITIS PATIENTS WITH NEGATIVE HEPATITIS B SURFACE ANTIGEN BUT POSITIVE ANTI-HEPATITIS B CORE ANTIGEN

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Background: Hepatitis B virus (HBV) reactivation in inflammatory arthritis IA (rheumatoid arthritis, psoriatic arthritis, and peripheral spondyloarthritis) 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.

Objectives: This retrospective, single centre study aimed to study the prevalence of HBV reactivation (defined as HBV DNA becoming detectable during treatment if it was undetectable at baseline, or an increase in HBV DNA titre if detectable at baseline) among IA patients with HBsAg-/anti-HBc+ status, and to investigate any factors predicting reactivation.

Methods: IA patients attending the rheumatology specialist clinic in a local tertiary hospital between 1st January 2011 and 31st December 2016 were included if they had HBsAg-/anti-HBc+ status. Demographic data, clinical parameters including treatments for IA and any use of antiviral prophylaxis, and laboratory results including anti-hepatitis B surface antibody (anti-HBs) and serial HBV DNA levels were obtained. Logistic regression was used to identify factors predicting HBV reactivation.

Results: Around 1/3 (68%) of the 206 included patients included were female and the mean age was 61.7-year-old. 75% had rheumatoid arthritis and the remaining had psoriatic arthritis or peripheral spondyloarthritis. Most patients (94%, n=194) were on conventional synthetic DMARD csDMARD (25 on monotherapy and 169 on combination therapy). 35% patients (n=72) were on biologic DMARD (with or without csDMARD). As antiviral prophylaxis was not mandatory in HBsAg-/anti-HBc+ patients according to local protocol, only 17 patients (8.3%) were on preemptive antiviral against HBV.

Thirteen patients (6.3%) experienced HBV reactivation during their disease course and four of them were on antiviral prophylaxis. All of these reactivations were only transient low-grade viraemia with HBV DNA level $\leq$ 20IU/ml. Spontaneous resolution of viraemia were observed in all these patients. None of the reactivation resulted in acute hepatitis, hepatic failure or mortality.

Presence of detectable HBV DNA at baseline predicted HBV reactivation (OR 21.0, $p < 0.005$). Other parameters including age, the lack of antiviral prophylaxis, negative anti-HBs status and anti-HBs titre were not significant predictors of HBV reactivation. None of the synthetic and biologic DMARDs were associated with HBV reactivation.

Conclusion: HBV reactivation was infrequent among IA patients with HBsAg-/anti-HBc+ status and was unlikely to be associated with adverse clinical outcome. It could occur in patients with positive anti-HBs or on antiviral prophylaxis. Detectable HBV DNA at baseline was a predictor of HBV reactivation.

REFERENCES

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

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Rheumatoid arthritis – biological DMARDs

AB0361

ASCORE, A 2-YEAR, OBSERVATIONAL, PROSPECTIVE MULTICENTRE STUDY OF SUBCUTANEOUS ABATACEPT FOR THE TREATMENT OF RHEUMATOID ARTHRITIS IN ROUTINE CLINICAL PRACTICE: 1-YEAR INTERIM ANALYSIS

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Background: ASCORE (Abatacept [ABA] SubCutaneQus in Routine clinical practice; ClinicalTrials.gov: NCT02090556) is an ongoing, 2-year, observational, prospective, multicentre study of patients (pts) with RA initiating SC ABA in routine clinical practice.

Objectives: To present for the first time 1-year interim retention rates and clinical outcomes by previous biologic (b)DMARD exposure.

Methods: Pts (≥ 18 years) with moderate-to-severe RA, who initiated SC ABA 125 mg weekly, were enrolled (Mar 2013–Jan 2017) across 10 countries in two cohorts: biologic-naïve pts and those who had failed ≥ 1 prior bDMARD. Pt and disease characteristics were recorded. ABA retention rates (95% CI) were estimated at 1 year by Kaplan–Meier analysis. Good/moderate EULAR response rates based on DAS28 (ESR, otherwise CRP), LDA or remission according to DAS28 (ESR; ≤ 3.2), SDAI (≤ 11), CDAI (≤ 10) and Boolean criteria were assessed at 1 year.

Results: A total of 2843/2949 enrolled pts were evaluable: 1162 (40.9%) were biologic naïve; 740 (26.0%) had failed 1 and 941 (33.1%) had failed ≥ 2 prior biologics. At baseline, pts with a higher vs lower number

of prior bDMARDs had longer disease duration and greater presence of erosive disease vs pts who were biologic-naïve; CRP was higher in biologic-naïve vs -failure pts; disease activity was similar across treatment exposures. Overall SC ABA retention (95% CI) at 1 year was 65.3% (63.4, 67.0); retention was higher in pts receiving ABA as a first vs later bDMARD (71.1% [68.3, 73.7] in biologic-naïve pts vs 61.9% [58.2, 65.4] and 60.7% [57.4, 63.8] in those with 1 and ≥ 2 prior biologic failures, respectively; Figure). At 1 year, 943 pts had discontinued ABA: 465/936 [49.7%] due to inefficacy and 218/936 [23.3%] due to safety (data unavailable, n=9/943). Among pts continuing ABA at 1 year, good/moderate EULAR response rates for pts who were biologic-naïve and those with 1 and ≥ 2 prior biologic failures were 81.0%, 70.0% and 66.4%, respectively. Corresponding rates for LDA outcomes were also higher with ABA as an earlier vs later bDMARD. The safety profile was similar across patient cohorts and consistent with real-world IV ABA studies.^{1,2}

Conclusion: In routine clinical practice, overall retention of SC abatacept at 1 year was around 65% and comparable with that of IV abatacept.² Among pts continuing abatacept at 1 year, good/moderate EULAR response rates were consistently $>65\%$ irrespective of prior bDMARD exposure. Better retention and clinical response rates were achieved with abatacept earlier in bDMARD treatment history.

REFERENCES

- [1] Nüßlein HG, et al. Clin Exp Rheumatol 2016;34:489–99.
- [2] Alten R, et al. RMD Open 2017;3:e000538.

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Figure. Abatacept retention over 1 year

Figure 1

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