Background: Ascending aorta has an increased stiffness (AoSI) in rheumatoid arthritis (RA) patients due to their chronic inflammatory status. We assessed prevalence and modification of AoSI during a follow up period and its prognostic role on cardiovascular events (CVE) in a large cohort of RA patients

Objectives: Prognostic role of AoSI and its modification over time on CVE.

Methods: We prospectively followed 146 RA patients without overt cardiac disease with periodic echocardiographic examination. Abnormally high AoSI was diagnosed if AoSi > 6.07% (95th percentile of the AoSI detected in our reference healthy population). AoSI was assessed at the level of the aortic root by two-dimensional guided M-mode evaluation as part of a thorough echocardiography performed in all patients. CVE information were collected during follow up

Results: Of our 146 RA patients, 89 had a normal AoSI at baseline, in the remaining 57 it was abnormally high. After a mean follow up of 27 months: among patients with normal baseline AoSI it stayed normal in 64 (6 to 5.6%) and in 25 raised to an abnormal high AoSI (from 3.7 to 11.9%); of the 57 patients with baseline high AoSI, 33 went back to normal values (9.4 to 3.1%) and in 24 it remained high. Of these 4 groups divided by AoSI trend over time the group with de novo high AoSI showed the highest prevalence of new CVE (33%), together with the group with persistent high AoSI (16%). Much lower prevalence was observed in the other two groups (persistent normal 5%, normalized at follow up 6%).

Objectives: Therefore, we investigated the clinical significance of anti-CarP in Korean patients with early RA focused on initial presentations and treatment outcome.

Methods: The anti-CarP antibodies were analysed by commercial ELISA (Novateinbio, USA) in the Korean Intensive Management of Early Rheumatoid Arthritis cohort. All patients were DMARD-naïve RA patients with symptom duration less than 1 year. They were intensively treated by adjusting medications every 4 weeks, and treated to target as disease activity score (DAS28) < 2.6. Baseline clinical characteristics and disease outcomes were compared according to the presence of anti-CarP antibodies.

Results: A total of 128 patients were included, 67 patients (52.3%) were positive for anti-CarP antibody at presentation. After 2 years of treatment, proportion of anti-CarP positivity decreased to 38.1% (p=0.049), but titration did not change (6.87 to 4.46 ng/ml, p=0.074). Patients without anti-CarP antibody presented with more tender joint count (TJC) (7.3 vs. 5.2, p=0.055), swollen joint count (SJC) (4.1 vs. 2.6, p=0.019) and higher baseline physician globalVAS (5.5 vs. 4.7, p=0.005) than patients with anti-CarP antibody. Subgroup analysis with ACPA negative patients, patients without anti-CarP antibody showed more TJC (13.7 vs. 4.7, p=0.043), SJC (7.9 vs. 3.0, p=0.076), higher patient global VAS (5.9 vs. 3.7, p=0.044) and DAS28-ESR (6.1 vs. 4.7, p=0.051). After intensive treatment, there were no differences in remission rate and DAS28-ESR at 12, 24, and 36 months.

Conclusion: Interestingly, RA patients without anti-CarP antibody presented with more TJC/SJC than those with anti-CarP antibody in Korean patients. This finding is in contrast to previous studies which were done with Caucasians. Further investigation is needed to conclude the clinical implications of anti-CarP.

REFERENCES