

inconventional cardiovascular risk factors. Exclusion criteria were smoking, diabetes mellitus, symptomatic AH, cardiovascular diseases (except AH). DMAS was measured by using the BPlab with technology VASOTENSE (Russian). An index of arterial stiffness (ASI), a daily index of arterial stiffness (AASI), an aortic pulse wave velocity (PWVao), augmentation index (Alx) were measured. All indexes were estimated at day and night hours.

Statistics was performed with STATISTICA 7.0 (StatSoft, USA).

Results: Hypertensive RA patients and AH patients without RA had comparable DMAS parameters (ASI, PWVao, Alx). The AASI index was higher in RA patients without AH versus controls (0.48±0.2 and 0.29±0.17, respectively, $p=0.00001$) and the AASI index was higher in hypertensive RA patients versus AH patients (0.5±0.2 and 0.38±0.15, respectively, $p=0.01$). AASI >0.07 revealed at RA patients more often than in controls: at 13.15% of hypertensive RA patients and at 16.6% of RA patients without AH, respectively, $p<0.05$. The increase of PWVao observed at RA patients frequently than in controls ($p<0.05$).

Daily index ASI100 was higher in RA patients without AH than in healthy controls (121 [109.5; 139] mmHg vs. 107 [103; 115] mmHg, $p=0.014$).

The increased of Alx75 was registered in 25% of RA patients without AH and in 9.09% of controls ($p=0.08$). PWVao and average Aix75 correlates with ESR ($r=0.38$ and $r=0.36$, respectively, $p<0.05$) in RA patients with AH; AASI correlates with level C-reactive protein ($r=0.36$, $p<0.05$).

ASI and AASI in RA patients with AH correlates with age (Spearman's $r=0.41$ and $r=0.36$, respectively, $p<0.05$), systolic blood pressure ($r=0.76$ and $r=0.65$, respectively, $p<0.05$); pulse blood pressure ($r=0.77$ and $r=0.43$, respectively, $p<0.05$).

Conclusions: Arterial stiffness, according to daily monitoring, in RA patients is higher than in hypertensive patients without RA and healthy controls. Arterial stiffness in patients with RA and AH is higher than in patients with RA without AH or AH without RA. Age, systolic blood pressure, pulse blood pressure, high levels of ESR and C-reactive protein associated with increased arterial stiffness in RA patients.

Disclosure of Interest: None declared

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SAT0135 CARDIOVASCULAR RISK IN RHEUMATOID ARTHRITIS PATIENTS FROM SOUTHERN BRAZIL AND ITS ASSOCIATION WITH SERUM LEVELS AND GENOTYPIC VARIATION OF MANNOSE BINDING LECTIN

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Background: The binding lectin mannose (MBL) is a serum protein of collectin family that appears to be involved in the inflammatory process and in the genesis of atherosclerotic disease.

Objectives: To study the association of serum levels of MBL and its genotypic variation with carotid arteries intimal thickness (IMT) in rheumatoid arthritis (RA) patients from Southern Brazil.

Methods: Serum level, MBL genotyping and IMT were studied in 90 RA patients along with their demographic, clinical and laboratory profile. MBL levels were measured in 90 healthy controls.

Results: There was significant difference between mean serum levels of MBL in patients with RA and controls (528 ng/mL vs 937.5 ng/mL, $p=0.05$, respectively). The median IMT in RA patients was 0.59 mm (0.51 to 0.85 mm). There was no correlation between levels of MBL with disease activity measured by DAS-28 (disease activity score-28), erythrocyte sedimentation rate (ESR), autoantibodies presence or IMT ($p=NS$). A negative correlation was found between MBL levels with CRP levels ($p=0.02$). The mutation val codon 54 (variant B) and HYPA haplotype were the most frequent (67.5% and 31.7%, respectively) in the RA sample. Dominant genotypes (A/A) are associated with lower IMT when compared with heterozygotes (A/O; $p=0.04$) and homozygous recessive (O/O; $p=0.05$). Also dominant genotypes had lower CRP when compared with heterozygous ($p=0.04$) or with recessive genotypes ($p=0.05$).

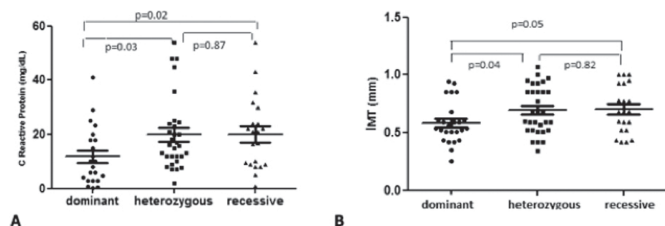


FIGURE 1: MBL GENOTYPING, C REACTIVE PROTEIN (CRP) AND CAROTID INTIMA MEDIA THICKNESS (IMT)

Conclusions: RA patients had lower MBL levels than controls. MBL serum levels are negatively associated with CRP; low producers of MBL had increased thickness of the IMT than high producers.

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SAT0136 ASSOCIATION OF GENOTYPES FOR BCL1 POLYMORPHISM IN THE GLUCOCORTICOID RECEPTOR GENE WITH ISCHEMIC HEART DISEASE IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: The objective is to study association of genotypes for Bcl1 polymorphism in the glucocorticoid receptor (GR) gene with ischemic heart disease (IHD) in patients with rheumatoid arthritis (RA).

Methods: 161 subjects with rheumatoid arthritis aged 40 years and older were examined by means of instrumental, clinical and laboratory examinations. Rheumatoid arthritis was diagnosed according to ACR/EULAR Classification Criteria (2010). The IHD diagnosis was verified by means of AHA/ACC guidelines (2012). BCL1 polymorphism in exon 2 was identified using polymerase chain reaction with subsequent analysis of restriction fragment length polymorphism by Fleury I. et al. (venous blood was used as the material for the study). Statistical analysis was performed using SPSS-17 program.

Results: It was revealed that 76 (47.2%) patients had isolated RA (group I), while 85 (52.8%) individuals had RA with concomitant IHD (group II). In group I, there were 29 (38.2%) patients with C/C genotype, 39 (51.3%) – with C/G genotype, and 8 (10.5%) – with G/G genotype. The distribution in group I was as following: 16 were homozygous for the C allele (18.8%), 40 were heterozygous (47.1%) and 29 were homozygous for the G allele (34.1%) ($\chi^2=15.23$; $p=0.02$). It was established that the risk of ischemic heart disease was 6.57 times higher in homozygotes for the G allele (OR=6.57; 95% CI=2.44–17.73; $p=0.001$) as compared with homozygotes for the C allele.

Conclusions: It was established that G/G genotype prevailed in RA patients with ischemic heart disease, while C/C genotype prevailed in patients with isolated RA. The risk of IHD development in patients with RA was associated with G/G genotype for Bcl1 polymorphism in the GR gene.

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SAT0137 BONE MINERAL DENSITY MEASUREMENT INTERVALS FOR SEROPOSITIVE RHEUMATOID ARTHRITIS PATIENTS NOT TREATED FOR OSTEOPOROSIS

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Background: Osteoporosis occurs more frequently in rheumatoid arthritis (RA) patients than in healthy individuals. However the appropriate interval for the bone mineral density (BMD) measurement in RA patients is not well established.

Objectives: This study investigated the effective BMD measurement interval and the risk factors associated with the development of osteoporosis for RA patients.

Methods: A retrospective study was performed on 511 RA patients aged more than 40 years old who had undergone BMD (DXA, GE LUNAR PRODIGY ADVANCE) testing more than once and who had normal BMD or osteopenia at the baseline BMD test and no history of any fracture of the spine or femur. The subjects were categorized into four subgroups: normal BMD (T-score > -1), mild (-1 ≤ T-score > -1.5), moderate (-1.5 ≤ T-score > -2), and advanced (-2 ≤ T-score > -2.5) osteopenia. The BMD testing interval was defined as the estimated time for 10% of the RA patients to make the transition into osteoporosis without osteoporotic fracture or the administration of any osteoporosis drug.

Results: The observation period was 2,214 patient-years, with an average of 4.3 years. The estimated BMD testing interval was more than 10 years for normal, 4.3 years for mild, 2.5 years for moderate, and 1.5 years for advanced osteopenia in each of the RA patient groups.

Conclusions: Our study indicated that in normal or osteopenic RA groups, a baseline BMD T-score is the most important factor in estimating the interval in which osteoporosis is predicted to occur. In addition, we recommend that the BMD measuring interval should be greater than 10 years in normal BMD RA