Objectives: The aim of this study is to evaluate cardiovascular risk factors and early atherosclerosis in rheumatoid arthritis patients, treated with biological agents.

Methods: This is a prospective, observational study. Thirty-five patients treated with synthetic DMARDs with no previous history of a cardiovascular event included. We compared total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), triglycerides (TGs), Apolipoprotein A1 (ApoA1), Apolipoprotein B (ApoB) and Lipoprotein A (LpA), the ratio of the titer of anti-oxLDL against oxidised LDL (anti-oxLDL), systolic blood pressure, inflammatory markers as C-reactive protein (CRP) and erythrocytes sedimentation rate (ESR) between baseline and after 6 months of biological agents initiation. An ultrasonographic measurement of intima-media thickness (IMT) of carotids was also performed by an experienced sonographer at baseline and after one-year follow-up.

Results: As regards the demographic characteristics of the patients, the mean (SD) age was 54 (14) years, disease duration 4.3 (1.4) years, 22.9% were smokers and 68.6% were women. Anti-TNF was administered in 71.4% of patients while the rest non-anti-TNF was given as treatment. Six months after treatment initiation, patients presented with significant increase in mean (SD) HDL[69 (19) vs58 (15)] and ApoA1[177 (34) vs162 (31)] levels (p <0.001) with a simultaneous significant reduction of mean (SD) systolic blood pressure [128 (12) vs136 (14)] and ApoA1[177 (34) vs162 (31)] levels (p <0.001) with a simultaneous significant reduction of mean (SD) systolic blood pressure [128 (12) vs136 (14)]. The titer of anti-oxLDL[130, (2), (0.04) vs190, (0.06)], IMT was also reduced after one-year reassessment [0.8, (0.3) mm vs 0.9, (0.3) mm, (p <0.001 for all comparisons)].

Conclusion: Biological agents administration was accompanied by an improved lipid profile in a six-month period and a significant reduction of IMT, confirming that RA patients are prone to early atherosclerosis and probably biological agents initiation correlates strongly with cardiovascular risk reduction.

REFERENCES:

Disclosure of Interests: None declared

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AB0163 ELECTROCARDIOGRAPHIC MANIFESTATIONS IN PATIENTS WITH SEROPOSITIVE RHEUMATOID ARTHRITIS

S. Spitina1,2, E. Mozgovaya1, A. Trolimenko1, S. Bedina1, M. Mamus1.

1 Federal State Budgetary Institution “Research Institute of Clinical and Experimental Rheumatology named after A.B. Zborovskiy”, 2 Clinical Biochemical Laboratory, Volgograd, Russian Federation; 3 Federal State Budgetary Educational Institution of Higher Education “Volgograd State Medical University” of the Ministry of Healthcare of the Russian Federation, Department of Hospital Therapy, Volgograd, Russian Federation

Background: Cardiovascular disease in rheumatoid arthritis (RA) is more common than in general population. Particular attention should be paid to cardiac dysfunction, as their timely diagnosis strongly affects the general outcome.

Objectives: To assess the prevalence of arrhythmias and conduction disorders in patients with seropositive RA without clinical manifestations of coronary artery disease, as well as to determine their relationship with activity and duration of RA.

Methods: The research was carried out in agreement with the WMA Declaration of Helsinki principles. 48 patients with seropositive RA were included in the study. The exclusion criteria were: age over 60 years; obesity; congenital heart defects; coronary artery disease; peripheral atherosclerosis; thyroid disease; diabetes mellitus. All patients were assessed using general physical, laboratory and instrumental survey including CBC, blood chemistry panel, as well as ECG. RA diagnosis was verified using the 2010 ACR / EULAR classification criteria. Central tendences were expressed as mean ±SD.

Results: All the included persons were women. Their average age was 50.50 ± 7.22 years, and average duration of the disease was 6.13 ± 2.34 years. All patients had articular form (without systemic manifestations) of moderate and high activity.

All the patients were treated with basic and NSAIDs therapy; no glucocorticoids were applied at the time of the examination. Using 12-lead ECG arrhythmias and conduction disorders were revealed in 27 (56.25%) of RA patients. Sinus rhythm deviations had the highest (31.25%) prevalence for all arrhythmias, comprising sinus tachycardia (18.75%), sinus Bradycardia (6.25%), and sinus arrhythmia (6.25%). Premature beats were registered in 12.5% cases, being supraventricular and ventricular ones in equal proportions. We have found left anterior bundle branch block in 6 (12.5%) of patients. Despite absence of any angina symptoms, 9 (18.75%) of patients had myocardial repolarization disturbances, either as ST depression deeper than 0.1 mV or as negative T wave appearance, which were quite similar to silent myocardial ischemia manifestations. All the patients with these features have RA disease history of more than 10 years. There was no relationship between the prevalence of the manifestations and radiographic stage of RA.

Conclusion: Arrhythmias and conduction disorders are quite frequent finding in seropositive RA (56.25% and 18.75%, respectively). Their incidence and severity do not coincide exactly with the radiographic progression in joints, while their prevalence generally increases with disease duration. These data highlight the importance of additional Holter ECG monitoring in RA for prevention and treatment of silent life-threatening cardiac complications.

Disclosure of Interests: None declared

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AB0162 OCULAR MANIFESTATIONS IN PATIENTS WITH RHEUMATOID ARTHRITIS


1 Medical University, University of Ioannina, Ioannina, Greece, Department of Internal Medicine, Medical School, University of Ioannina, Ioannina, Greece, Ioannina, Greece; 2 Internal Medicine, University of Ioannina, Greece, Department of Internal Medicine, Medical School, University of Ioannina, Ioannina, Greece, Ioannina, Greece; 3Rheumatology Clinic, University of Ioannina, Ioannina, Greece, Greece, Department of Internal Medicine, Medical School, University of Ioannina, Ioannina, Greece, Ioannina, Greece

Background: Rheumatoid arthritis (RA) is the most common systemic autoimmune disease and is associated with a number of extra-articular organ manifestations, including ocular complications.

Objectives: The aim of this study is to evaluate the frequency and characteristics of ocular manifestation in patients with rheumatoid arthritis (RA).

Methods: The study involved 87 patients with RA. All the study subjects underwent complete ophthalmological examination including visual acuity assessment, examination of anterior and posterior eye segments, Schirmer’s test, diameter and mobility of pupils, as well as eyeball mobility assessment of intracranial pressure. Data regarding age, gender, disease duration, age at diagnosis, systemic corticosteroid use, blood pressure, ocular symptoms and detailed ophthalmic history were recorded. The presence of rheumatoid factor in serum was evaluated by standard test methods based on principle of agglutination. All patients were seropositive.

Results: 67 patients (26 male, 59 female, mean age 45.6 ± 13.1 years; mean disease duration 7.4 ± 6.2 years) with RA were enrolled in this study. 31 (35.63 %) of them had no ocular symptoms. Among the patients with ocular symptoms, 39 (69.64 %) complained of decreased vision, 33 (58.93 %) - of dry eye, 32 (57.14 %) - of burning, 29 (51.78 %) -photophobia, 28 (50 %) - of gritty sensation, 27 (48.21 %) - of itching, 18 (32.14 %) - of redness, 13 (23.21 %) - of ocular pain, 3 (5.36 %) - of floaters. Ophthalmological examination revealed higher incidence of the following abnormalities in the study group: myopia (-10.57 %), vascular abnormalities within fundus - in 22 (12.64 %) eyes, increased intraocular pressure (>21 mm Hg) - in 11 (6.32 %) eyes. Mean IOP values were 17.34 ± 5.12 mm Hg. In 48 eyes Schirmer’s test results were below 10 mm, and in 18 eyes - below 5 mm. Keratoconjunctivitis sicca was present in 31 (35.63 %) of all patients. Episcleritis was diagnosed in 4 patients (4.6%), scleritis - in 3 (3.45 %). Retinal vasculitis was present in 2 (2.3 %) patients and involves veins and arteries peripheral branches. Lens opacity was found in 13 (14.94 %) patients (21 eyes), mostly in the form of posterior subcapsular cataract (in 16 eyes) and nuclear cataract (in 5 eyes). The mean age of patients with cataracts was 52.3 ± 14.2 years. 13 of the patients with cataracts were either currently taking or had previously taken systemic corticosteroids.

Conclusion: In patients with RA numerous abnormalities within the vision of organ may be found. Ocular symptoms are relatively common complications of RA, and may result in irreversible changes in the organ of vision. Regular ophthalmological examinations are essential among the patients with RA.

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