SAT0137

CAROTID INTIMA-MEDIA THICKNESS AND ATHEROSCLEROTIC PLAQUE IN PATIENTS WITH REACTIVE AND RHEUMATOID ARTHRITIS

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Background: It is well-known that the leading cause of premature mortality in patients with rheumatoid arthritis (RA) is cardiovascular disease, myocardial infarction, heart failure, stroke.^{1,2} Another important group of rheumatic diseases that attract the attention in connection with possible proatherogenic effects are the seronegative spondyloarthropathies. Reactive arthritis (ReA) may involve the cardiovascular system, aortitis, myocarditis, pericarditis.^{3,4}

Objectives: to estimate atherosclerotic changes of arteries in patients with RA and ReA, to confront the revealed changes with clinical features of joint pathology, activity of inflammatory process.

Methods: We included 75 patients with RA (age 38,7±7,4, disease duration 8,3±5,4), 41 patients with chronic ReA (age 35,8±7,2 disease duration 6,4±4,5) and 29 healthy subjects, matched for age and gender, without a history of CVD. An ultrasound investigation of the arterial vassal with measurement of the intima-media thickness (IMT) of carotids was performed.

Results: It has been determined, that in RA group IMT was 0,8 mm (0,7–0,9), compared with 0,6 mm (0,6–0,7) in ReA and 0,6 mm (0,6–0,7) in control group. In RA group IMT positively correlate with the age, duration of disease, Ritchie index, C-reactive protein level. In ReA group disease duration, C-reactive protein level, Ritchie index are not associated with IMT.

In 22 (29,3%) patients with RA we found atherosclerotic plaques lesion in carotids, aorta, and vessels of the lower extremities. Only in 1 (2,4%) patient with PeA we found atherosclerotic plaques. Presence of atherosclerotic plaques associated with RA ($\chi^2=8,75$, $p<0,05$). In RA detection of atherosclerotic plaques associated with disease durations (12 years (10–15) in group with plaques and 5 years (3–8) in group without plaques). The presence of atherosclerotic plaques is associated with rheumatoid factor ($\chi^2=1,02$, $p>0,05$), and systemic manifestations of RA ($\chi^2=15,89$, $p<0,001$).

Conclusions: Patients with RA had an increase thickness of IMT and atherosclerotic plaques, which appear in various vascular regions. Long-term duration of ReA is not associated with development atherosclerotic lesion.

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SAT0138

A DELAY TO DIAGNOSIS, BUT NOT TO TREATMENT INITIATION, IN PATIENTS WITH RHEUMATOID ARTHRITIS (RA) IS ASSOCIATED WITH ETHNIC GROUP AT ONE US ACADEMIC SITE

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Background: Disparities in the initiation of disease modifying antirheumatic drugs (DMARDs) therapy in ethnic minorities have been described in rheumatoid arthritis (RA)(1). These disparities are of particular concern in view of the emergence of early diagnosis and aggressive treatment as a cornerstone of management. Delays in diagnosis and treatment have been ascribed in part to lack of awareness, insidious onset, and atypical clinical presentation, but patient-dependent factors may be as important.

Objectives: To evaluate disparities in referral and initiation of treatment in RA patients at a USA academic rheumatology site.

Methods: We conducted a retrospective study and reviewed the medical records of patients with a primary diagnosis of RA seen at one USA academic setting (2011–2016). Among 642 RA patients, 50 received their initial evaluation by a rheumatologist during the observation period, and were naïve to any DMARD. Data extraction included time between first symptoms and initial visit to our rheumatology facility, demographics, family history, and laboratory tests. In addition, a Multidimensional-Health Assessment Questionnaire (MDHAQ) allowed us to calculate a RAPID3 score as the sum of 0–10 scores for a pain visual analogue scale

(VAS), patient global VAS, and physical function. The time to initiation and type of DMARD prescribed after the first visit was also collected. Statistical analyses were performed using Kruskal-Wallis for differences between medians and chi-squared tests for comparisons between proportions according to ethnicity groups.

Results: Fifty new patients with RA were seen in the rheumatology outpatient clinic; 43% were White, 34% Black, and 23% Hispanic. The median delay to be seen by a rheumatologist was 7.2 months for White patients, 12 months for Black, and 11.9 months for Hispanic patients. There were no significant differences in time to initiation of DMARD according to ethnicity. Methotrexate was the DMARD most frequently prescribed, ranging from 86% in White patients to 60% in Hispanic patients. Disease severity according to RAPID3 scores was higher in Black and Hispanic groups, although laboratory tests did not differ between the 3 groups (Table).

Table 1. Patient characteristics by ethnicity

	White N=23	Black N=17	Hispanic N=10
Age, mean (SD)	55.5 (13.1)	52.6 (12.3)	49.7 (10.2)
Female, %	74%	88%	80%
Family History of RA, %	15%	9%	20%
Median disease duration (IQR) at the time of first rheumatology evaluation, months	7.2 (4.7, 23.9)	12.0 (7.7, 22.9)	11.9 (5.0, 47.9)*
Time to initiate DMARDs, months, median (IQR)	1.0 (0.5,1.8)	0.8 (0.6,1.6)	0.5 (0,0.7)
Methotrexate	86%	75%	60%
Rheumatoid Factor, %	50%	64%	75%
Anti-CCP, %	69%	64%	80%
ESR, mean (IQR)	15 (10, 25)	23.5 (17, 41)	38 (19, 46)
CRP, mean (IQR)	5 (5, 15)	5 (5, 5.8)	5 (5, 7)
RAPID3, mean (IQR)	12.9 (8.2, 16.9)	18.8 (14.6, 19.4)	18.5 (10.2, 21.5)*

Statistical significance in **bold** * $p<0.05$.

Conclusions: There is a considerable delay in initial referral to a rheumatologist, which appears to be more pronounced among Black and Hispanic patients. However, once seen in the clinic, initiation of DMARDs occurred within 1-month, regardless of ethnicity. These findings suggest that ethnic minorities are at risk of deleterious outcomes as a consequence of delayed presentation to a rheumatology setting.

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SAT0139

SUBCLINICAL IMPAIRMENT OF MYOCARDIAL FUNCTIONALITY DURING THE VERY EARLY STAGE OF INFLAMMATORY JOINT DISEASES

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Background: cardiovascular (CV) disease morbidity is increased in inflammatory joint diseases (IJD), as rheumatoid (RA) and psoriatic arthritis (PsA). Whereas accelerated subclinical atherosclerosis and endothelial dysfunction have been widely studied, less attention has been paid to myocardial function. RA patients with established disease who develop heart failure often have impaired left ventricular (LV) diastolic functionality with preserved LV ejection fraction (EF) and present fewer signs than non-RA patients. Then, additional and more sensitive screening tools as myocardial strain imaging are needed. In this sense, speckle-tracking echocardiography (STE) has been demonstrated to be suitable for detecting impaired systolic function. Although CV risk is increased at disease onset, whether abnormal myocardial functionality could be found already in the early phase of IJD remains unknown.