AB1291

CAROTID INTIMA-MEDIA THICKNESS IS INCREASED IN MEXICAN-MESTIZO PATIENTS WITH RHEUMATOID ARTHRITIS: A CASE-CONTROL STUDY

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Background: Patients with rheumatoid arthritis (RA) have a significantly increased risk for cardiovascular (CV) morbidity and mortality when compared to general population. Traditional risk factors do not explain the increased CV risk, which appears to be linked to chronic inflammation.¹ The leading cause of death in RA-patients is atherosclerotic cardiovascular disease (ASCVD).² Carotid artery evaluation by ultrasound is a useful tool for the detection of subclinical atherosclerosis. The presence of increased carotid intima-media thickness (CIMT) significantly raises the risk of ASCVD, mainly stroke and myocardial infarction.³

Objectives: To compare CIMT between Mexican-mestizo RA-patients and matched controls.

Methods: Design: observational, cross-sectional, case-control study. Patients 40 to 75 years old who fulfilled the 2010 ACR/EULAR and/or the 1987 ACR classification criteria for RA were consecutively enrolled. Patients with previous ASCVD or any other rheumatic disease were excluded. Carotid artery wall hypertrophy (CAWH) was defined as a CIMT ≥ 0.9 and < 1.2 mm whereas carotid plaque (CP) was defined as a CIMT ≥ 1.2 mm or $\geq 50\%$ focal increase of CIMT compared to the surrounding wall.

Results: A total of 100 RA-patients and 49 matched control subjects were included in the final analysis. Their characteristics are shown in Figure 1. RA-patients had a median disease duration of 10.3 years and a median DAS-28-CRP of 3.2. Regarding carotid ultrasound findings, there was a significant difference in CAWH and average CIMT between groups ($p < 0.001$).

	RA-Patient Group (n = 100)	Control Group (n = 49)	P
Female gender, n (%)	96 (96)	42 (85.7)	0.04
Age, mean $\pm$ SD	56.6 $\pm$ 9.1	53.6 $\pm$ 6.4	0.6
DM2, n (%)	14 (14)	4 (8.1)	0.42
Current Smoking	9 (9)	12 (24.4)	0.03
Lipid-lowering drug use	16 (16)	7 (14.2)	0.78
CAWH, n (%)	27 (27)	1 (2)	<0.001
Carotid Plaque, n (%)	27 (27)	16 (32.7)	0.564
Average CIMT (mm), median (p25 – p75)	0.82 (0.71 – 1)	0.62 (0.52 – 0.85)	<0.001
Disease duration (years), median (p25 – p75)	10.3 (4.2 – 17.9)	–	–
DAS-28-CRP, median (p25 – p75)	3.2 (1.9 – 4.1)	–	–

Abstract AB1291 – Figure 1. Demographic Characteristics

SD: Standard deviation, DM2: Type 2 diabetes mellitus, CAWH: Carotid artery wall hypertrophy, CIMT: Carotid intima-media thickness.

Conclusions: There was significantly increased CIMT and presence of CAWH in RA-patients compared to matched controls. These findings might be major contributors to the increased CV morbidity and mortality of RA-patients. Further research is needed to determine the relationship between RA-specific factors such as disease duration and activity and the presence and magnitude of carotid ultrasound abnormalities.

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AB1292

METABOLIC SYNDROME AND ITS COMPONENTS AMONG HISPANIC RA PATIENTS: A CASE CONTROL STUDY

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Background: Metabolic syndrome (MetS) comprises a group of risk factors for type 2 diabetes and cardiovascular diseases. MetS is responsible for a three-fold increase in the risk of atherosclerotic cardiovascular diseases (ASCVD) and increased mortality compared to general population.¹ The frequency of MetS in RA patients is 14% to 56%. However, although many studies have reported a higher prevalence of MetS among RA patients, a number of studies have reported a higher prevalence of MetS in healthy controls.² Despite the importance of detection of MetS and its role in RA patients, information is scarce.

Objectives: To compare the prevalence of MetS among Mexican-mestizo RA-patients and matched controls.

Methods: Design: observational, cross-sectional, case-control study. Patients of 40 to 75 years old who fulfilled the 2010 ACR/EULAR and/or the 1987 ACR classification criteria for RA were consecutively enrolled. Patients with any other rheumatic disease were excluded. Our study used ATP III Criteria (Abdominal obesity: Men > 102 cm Women > 88 cm; Triglyceride level ≥ 150 mg/dL; HDL < 40 mg/dL for men < 50 mg/dL for women; Blood pressure $\geq 130/\geq 85$ mmHg; Fasting glucose ≥ 100 mg/dL) to classify patients with MetS.

Results: There were no differences in any independent variable of these patients. However there was a higher prevalence of high blood pressure in controls than RA patients (See Table 1).

A. Demographic Characteristics			
Variable	RA n=299	Control n=125	P
Age (years), mean $\pm$ SD	55.3 $\pm$ 13.3	53.5 $\pm$ 5.7	0.282
Women, n (%)	287 (96)	112 (90)	0.240
Weight, mean $\pm$ SD	68.2 $\pm$ 13.3	73.1 $\pm$ 15.0	0.085
Height (meters), mean $\pm$ SD	1.5 $\pm$ 0	1.5 $\pm$ 0.07	0.001
BMI, mean $\pm$ SD	28.5 $\pm$ 4.9	28.6 $\pm$ 4.6	0.889
Waist circumference (cm), mean $\pm$ SD	95.8 $\pm$ 8.6	96.2 $\pm$ 4.4	0.452
Type 2 diabetes mellitus, n (%)	47 (16)	20 (16)	0.999
Hypertension, n (%)	114 (38)	35 (28)	0.288
Dyslipidemia, n (%)	108 (36)	20 (16)	0.023
Active smokers, n (%)	18 (6)	13 (10)	0.461
B. Metabolic Syndrome, ATP III Criteria			
Variable	RA n=299	Control n=125	P
Metabolic syndrome, n (%)	100 (33)	46 (37)	0.570
Large waist circumference, n (%)	230 (77)	93 (74)	0.980
High triglyceride level, n (%)	108 (36)	40 (32)	0.417
Reduced high-density lipoprotein, n (%)	141 (47)	66 (53)	0.280
Increased blood pressure, n (%)	52 (17)	50 (40)	0.000001
Elevated fasting blood glucose, n (%)	85 (28)	30 (24)	0.425

Abstract AB1292 – Figure 1. Metabolic Syndrome among RA patients. A. Demographic Characteristics. B. Metabolic Syndrome by ATP III Criteria

Conclusions: There is no difference in the diagnosis of MetS in RA patients than control population. However, the role of the diagnosis of MetS in patients with RA represents an important task in the management of the disease in order to reduce its high cardiovascular risk.

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