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FRI0093 CAROTID ATHEROSCLEROSIS IS ASSOCIATED WITH DISEASE ACTIVITY AND BONE MINERAL DENSITY IN RHEUMATOID ARTHRITIS

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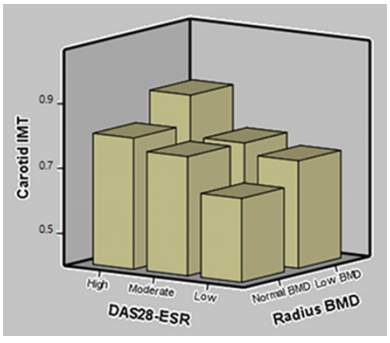
Background: Rheumatoid arthritis (RA) is a chronic inflammatory disease which causes juxta-articular and generalized bone loss. Several studies revealed that bone mineral density (BMD) is associated with atherosclerosis.
Objectives: In the present study, we investigated the association between BMD and RA disease activity and the carotid atherosclerosis in RA patients based Kyungpook National University Hospital Atherosclerosis Risk in Rheumatoid Arthritis (KARRA) cohort study.
Methods: A total of 323 patients with RA, who performed dual-photon x-ray absorptiometry and carotid ultrasound, were included. We assessed RA disease activity, risk factors for atherosclerosis including hypertension, diabetes mellitus and dyslipidemia, presence of carotid plaque, carotid intima-media thickness (IMT), and BMD. BMD was measured at the lumbar spine (L-spine, L1-L4), femur neck (total femur neck) and distal forearm (total radius), and low BMD was defined as a T score of -1.0 or less.
Results: The BMD in the L-spine, femur, and radius was significantly lower in patients with carotid plaques (n=152), compared to patients without plaques (n=171) (1.014 g/cm^2 ± 0.21 vs. 1.066 g/cm^2 ± 0.18, p=0.016 for L-spine; 0.816 g/cm^2 ± 0.16 vs. 0.863 g/cm^2 ± 0.13, p<0.001 for femur; 0.542 g/cm^2 ± 0.13 vs. 0.603 g/cm^2 ± 0.12, p<0.001 for radius). The frequency of low BMD in these areas was also higher in patients with carotid plaques, compared to patients without plaques (52.7% vs. 47.5%, p=0.045 for L-spine; 56.0% vs. 44.0%, p=0.001 for femur; 60.6% vs. 39.4%, p<0.001 for radius). Carotid IMT showed a significant difference between patients with low BMD and those with normal BMD (0.84 mm ± 0.14 vs. 0.80 mm ± 0.19, p=0.025 for L-spine; 0.83 mm ± 0.15 vs. 0.80 mm ± 0.18, p=0.045 for femur; 0.85 mm ± 0.15 vs. 0.77 mm ± 0.18, p <0.001 for radius). In subgroup analysis, patients with the highest IMT quartile had a significantly lower BMD in all the regions than those with the lowest IMT quartile (61.2% vs. 37.7%, p=0.004 for L-spine; 59.5% vs. 35.1%, p=0.003 for femur; and 71.4% vs. 28.6%, p<0.001 for radius). Multivariate logistic regression analysis demonstrated that BMD at radius (OR 4.995, 95% CI [1.067–10.276], p<0.001), DAS28-ESR (OR 1.906, 95% CI [1.042–3.046], p=0.036), and dyslipidemia (OR 2.334, 95% CI [1.164–3.156], p=0.02) were risk factors for presence of carotid plaques.



Conclusions: The present study showed that carotid atherosclerosis was influenced by both disease activity and impaired bone health.
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FRI0094 TIME TO AND FACTORS ASSOCIATED WITH INITIATION OF BIOLOGICAL THERAPY WITH DISEASE-MODIFYING ANTIRHEUMATIC DRUGS IN PATIENTS WITH RHEUMATOID ARTHRITIS IN COLOMBIA

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Background: Rheumatoid arthritis (RA) treatment is usually done with non-biological disease-modifying antirheumatic drugs (DMARDs), but the addition of a biological DMARD can be necessary. Biological drug therapy is usually prescribed following failure to achieve remission of the morbidity with one or more non-biological DMARDs. However, there is the possibility of using them as a first line in the initial phase, which there is the possibility of potentially altering its course or even reverting it to normality.
Objectives: To determine the time Colombian patients with rheumatoid arthritis (RA) are treated with non-biological disease-modifying antirheumatic drugs (DMARDs) before changing to biological therapy.
Methods: A retrospective cohort study that collected information about the start of antirheumatic treatment in patients of all ages with a diagnosis of RA until the change to biological DMARD therapy. Survival analysis using Kaplan–Meier curves, from 1 January 2007 until 31 December 2013 by SPSS 23.0 for Windows, was made.
Results: A total of 3880 patients (75.3% women) with a mean age of 51.3 years started non-biological DMARDs. After 5 years, 234 patients (6.0%) initiated biological DMARD therapy in 17.5±13.9 months. Differences in the socio demographic and pharmacological characteristics between the two groups of treatment are shown in the table 1. The use of glucocorticoids was associated with a greater risk of biological DMARD initiation (OR: 2.49; 95% CI: 1.658–3.732; p<0.001), while the use of methotrexate (OR: 0.04; 95% CI: 0.014–0.108; p<0.001) and chloroquine (OR: 0.13; 95% CI: 0.092–0.187; p<0.001) reduced the risk of initiation.

Variables	Non biological DMARDs (n: 3646)	%	Biological DMARDs (n: 234)	%
Sociodemographic				
Aged (mean ± SD)	52.2± 14.8		51.2± 16.2	
Sex (Male/Female, %)	74/160	31.6/68.4	884/2762	24.3/75.7
Women > 55 años	1364	37.4	79	33.8
Men > 45 años	580	15.9	46	19.6
Initial therapy				
Chloroquine	1485	40.7	44	18.8
Sulfasalazine	945	25.9	0	0
Methotrexate	493	13.5	4	1.7
Azatriopine	300	8.2	21	9.0
Cyclophosphamide	117	3.2	9	3.8
Cyclosporine	112	3.1	8	3.4
Others	59	1.6	4	1.7
Comedication				
Glucocorticoids	2183	59.9	199	85.0
Antihypertensives	582	16.0	52	22.2
Diuretics	281	7.7	19	8.1
Hipolipemiants	414	11.3	33	14.1
Antiplatelets	298	8.2	20	8.5
Antidiabetics	170	4.7	11	4.7
Nonsteroidal anti-inflammatory drugs	298	8.2	34	14.5
Antiulcer drugs	623	17.1	91	38.9
Thyroid hormone	200	5.5	21	9.0
Vitamin D and Calcium	283	7.8	43	18.4

Conclusions: After 5 years of non-biological DMARD therapy, 6.0% of people with RA started biological DMARDs. Receiving glucocorticoids, having any comedication, being treated in Bogota City or cities of the Colombian Atlantic coast affected the probability of switching to biological therapy in these patients.
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