

was used to model the differences in the comorbidity indices between race groups.

Results: 453 EMRAC subjects were analyzed; 342 (81.4%) were female, average age was 58.9 (\pm 15.1) years, average duration 13.3 (\pm 11.1) years and average follow-up length 2.1 (\pm 1.4) years. Individual comorbidity frequencies as well as comorbidity indices are summarized in Table 1. Spearman correlation between overall RDCI and COUNT was 0.90 (95% CI [0.88, 0.91], $P < 0.001$). Hispanics, however, had significantly lower comorbidity indices scores than other race groups (RDCI Hispanic vs White $P = 0.003$, Hispanic vs Black $P = 0.004$, Hispanic vs Other $P = 0.038$; COUNT Hispanic vs White $P = 0.012$, Hispanic vs Black $P = 0.004$, Hispanic vs Other $P = 0.151$).

Table 1. Clinical Characteristics of EMRAC study cohort

	White	Black	Hispanic	Other	Total
N	102	195	85	71	453
Hypertension [N (%)]	36 (35.3%)	79 (40.5%)	24 (28.2%)	31 (43.7%)	170 (37.5%)
Coronary Artery Disease [N (%)]	12 (11.8%)	14 (7.2%)	3 (5.9%)	2 (2.8%)	31 (6.8%)
Other Heart Disease [N (%)]	11 (10.8%)	6 (3.1%)	2 (2.4%)	2 (2.8%)	21 (4.6%)
Fracture [N (%)]	11 (10.8%)	8 (4.1%)	2 (2.4%)	2 (2.8%)	23 (5.1%)
Psychiatric Disease [N (%)]	5 (4.9%)	10 (5.1%)	1 (1.2%)	0 (0.0%)	16 (3.5%)
Diabetes [N (%)]	11 (10.8%)	33 (16.9%)	9 (10.6%)	8 (11.3%)	61 (13.5%)
Cancer [N (%)]	9 (8.8%)	8 (4.1%)	5 (5.9%)	3 (4.2%)	25 (5.5%)
Stomach [N (%)]	8 (7.8%)	9 (4.6%)	8 (9.4%)	7 (9.9%)	32 (7.1%)
Stroke [N (%)]	4 (3.9%)	6 (3.1%)	2 (2.4%)	2 (2.8%)	14 (3.1%)
Hyperlipidemia [N (%)]	19 (18.6%)	29 (14.9%)	9 (10.6%)	12 (16.9%)	69 (15.2%)
Chronic Bronchitis [N (%)]	10 (9.8%)	17 (8.7%)	5 (5.9%)	5 (7.0%)	37 (8.2%)
Pulmonary Fibrosis [N (%)]	2 (2.0%)	5 (2.6%)	4 (4.7%)	0 (0.0%)	11 (2.4%)
Kidney Disease [N (%)]	3 (2.9%)	5 (2.6%)	0 (0.0%)	2 (2.8%)	10 (2.2%)
RAPID3	13.1 (6.8)	12.5 (7.4)	14.8 (6.9)	13.7 (7.2)	13.3 (7.1)
<i>Enrollment</i>					
RDCI	1.8 (2.1)	1.7 (2.0)	1.2 (1.7)	1.6 (1.8)	1.6 (1.9)
COUNT	1.0 (1.3)	1.0 (1.3)	0.7 (0.9)	0.9 (1.1)	0.9 (1.2)

Mean (SD) reported unless otherwise noted.

Conclusions: In an ethnic RA subset, the RDCI and COUNT correlated well across ethnic groups. The comorbidity indices were not associated with RA disease activity at enrollment as assessed by the RAPID3. Hispanics had lower RDCI and COUNT scores compared to other race groups but also presented at a younger age which could account for this difference. More studies are needed to determine the predictive value of these indices in determining poor outcomes and mortality in this ethnic subset.

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SAT0130 EVALUATION OF THE FACTORS RELATED WITH RISK OF FALLING AND FEAR OF FALLING IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: People with rheumatoid arthritis (RA) have an increased risk of falls (1,2). The identification of predictive and potentially modifiable risk factors is essential for the development of effective falls prevention strategies (3).

Objectives: The aim of the study is to determine the relationship between falling risk and falling fear with balance, lower extremity muscle strength, functional status, disease activity and pain in patients with Rheumatoid Arthritis (RA)

Methods: A total of 124 patients (92 females, 32 males) who were diagnosed with RA according to the American College of Rheumatology (ACR) diagnostic criteria were included in the study. The fear of falling was assessed by the Fall Efficacy Scale (FES-I) and the shortened form (Short FES-I). Disease activity was assessed using the Disease Activity Score-28 (DAS28), the functional status was assessed with Health Assessment Questionnaire (HAQ). While lower extremity muscle strength was determined using Chair Stand Test, Four Balance Test was used to determine the balance. The pain intensity was determined using 10 cm Visual Analogue Scale-Pain (VAS-pain).

Results: The mean age of the patients is 54.75 \pm 10.96 years, the mean duration of illness is 14.10 \pm 10.99 years. A statistically significant relationship was found between FES-I, Short FES-I scores and HAQ (respectively $r:0.776$, $p:0.000$; $r:0.783$, $p:0.000$), VAS rest ($r:0.397$, $p:0.000$; $r:0.405$, $p:0.000$), VAS motion ($r:0.542$, $p:0.000$; $r:0.519$, $p:0.000$), DAS28 values ($r:0.216$, $r:0.181$; $r:0.260$, $p:0.004$). There was a significant negative correlation between FES-I, Short FES-I scores and Chair Stand Test (respectively $r:-0.644$, $p:0.000$; $r:-0.652$, $p:0.000$), Four Balance Test ($r:-0.597$, $p:0.000$; $r:-0.611$, $p:0.000$). There was a statistically significant correlation between the number of falls in the last year and age, duration of illness, HAQ, DAS28, VAS scores ($p < 0.05$)

Conclusions: The risk of falling and fear of falling is associated with balance, lower extremity muscle strength, disease activity, functional status, and pain in patients with RA. Therefore; the risk of falling and fear of falling should be determined and necessary measures must be taken in patients with RA.

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SAT0131 MEDIAN NERVE THICKNESS RELATED TO RENAL IMPAIRMENT IN RHEUMATOID ARTHRITIS

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Background: Autoimmune processes, contribute to the burden of kidney disease. The reported kidney disease prevalence in patients with rheumatoid arthritis (RA) ranges from 5%–50% based on studies of different designs. Historically, patients with RA-associated renal amyloidosis had higher mortality rates relative to the general population. The occurrence of haematuria, proteinuria, or CKD has been reported to be associated with a 3- to 4-fold increased risk of death. Subclinical decreased kidney function has been identified as an independent risk factor for cardiovascular (CV) events with increase mortality in patients with RA. On the other hand, both rheumatoid arthritis and renal impairment have been reported to be associated with increase prevalence of carpal tunnel syndrome.

Objectives: To establish the median nerve thickness (measured by ultrasound) in RA and its relation to renal function.

Methods: 120 RA patients were recruited through a specialized rheumatology clinic. The US measurements were performed by the same person. Patients were sitting with their forearm resting in a supinated position on a small table. The US probe (an 8–16 MHz linear array transducer) was held as lightly as possible to avoid disturbing the anatomy of the nerve. The median nerve was examined at the entrance of the carpal tunnel, between the pisiform bone and the tubercle of the scaphoid bone, where the distal volar crease is an external pisiform landmark. A continuous trace was made just within the hyperechogenic boundary of the nerve. The cross-sectional area of the median nerve was calculated directly by the software of the US equipment. Each median nerve was measured three times, and the mean value was used for further analyses. Modification of Diet in Renal Disease (MDRD) equation used to estimate the Glomerular Filtration Rate (GFR). The average of the right and the left areas of the median nerve were used when exploring bivariate correlations to the renal variables (Pearson's correlation coefficients). All statistics were performed using STATA programme.

Results: the average median nerve thickness was 9.79 \pm 2.6 mm² (Range 1.5–22.25). The average GFR was 122 \pm 20 ml/min (59.6–286). Thickness of the median nerve was positively associated with the age of the participants ($p = 0.03$, CI: 0.00, 0.08), body mass index ($p = 0.04$, CI: 0.00, 0.21), uric acid level ($p = 0.033$, CI: 0.00, 0.01), and urine microalbumin ($p = 0.04$, CI 0.00, 0.01). GFR showed no significant relation the thickness of the median nerve.

Conclusions: RA patients without symptoms or clinical signs have a median nerve thickness that is positively correlated to the level of microalbumin and uric acid. Whether sonographic examination of the median nerve would be helpful in predicting who is going to have a deteriorated renal function need to be explored in a larger study.

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SAT0132 THE RHEUMATOID ARTHRITIS FLARE QUESTIONNAIRE (RA-FQ): RESULTS OF RASCH ANALYSIS AND FEEDBACK ON REAL-WORLD APPLICATIONS FROM INTERNATIONAL RA PATIENTS AND CLINICIANS

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