Objectives: The aim of this study was to estimate the proportion of EAMs in southern Chinese patients with IJDs and to explore the risk factors.

Methods: This was a retrospective cohort study of a total 1135 IJDs patients, including 788 rheumatoid arthritis (RA) patients, 307 ankylosing spondylitis (AS) patients and 40 psoriatic arthritis (PsA) patients. Demographic data, disease characteristics, laboratory blood tests, medical imaging, and the presence of EAMs were recorded.

Results: We found 459 (40.44%) of them presented with EAMs: 30.84% had cardiovascular; 7.67% had pulmonary, 5.29% had osteoporosis/low bone mineral density, 2.29% had ocular, 0.79% had gastrointestinal and 0.26% had renal involvements. Multivariate logistic regression showed older age (OR: 1.05, $P<0.001$) and higher anti-cyclic citrullinated peptide antibody (anti-CCP) levels (OR: 1.003, $P=0.011$) were independent risks of EAMs in RA patients. In AS group, older age (OR: 1.07, $P<0.001$) and higher disease activity (OR: 2.06, $P<0.001$), were independent risks of EAMs. As in PsA group, longer disease duration (OR: 1.01, $P=0.046$) and higher disease activity (OR: 1.15, $P=0.011$) were independent risks.

Conclusion: These results suggested the high prevalence of EAMs, and it is important to regularly screen on EAMs, as it influences treatment decision and impacts on patients' quality of life.

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.5259

AB0311 HEMOSTASIS IN AFRICAN BLACK COMPARED TO WHITE PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Aberrant hemostasis is implicated in the increased CVD risk experienced by patients with rheumatoid arthritis (RA) (1). Large circulating concentrations of plasminogen activator inhibitor-1 (PAI-1) predict cardiovascular event rates (2). PAI-1 levels are markedly smaller in American and African black populations than in those of European descent (3,4). Whether this protection persists in black persons who have RA is unknown.

Objectives: This study compared hemostasis factors among African black and white RA patients

Methods: PAI-1, tissue factor pathway inhibitor (TFPI) and tissue plasminogen activator (t-PA) levels were measured by ELISA in 236 (114 black; 122 white) African RA patients. Data were analysed in mixed regression models.

Results: In age and sex adjusted analysis, PAI-1 concentrations were larger in black compared to white patients with RA (median (interquartile range (IQR))=12.4 (3.1-28.7) versus 5.4 (1.5-25.0) ng/ml, $p=0.006$). In all patients, body mass index (BMI) (β (SE)=0.022 (0.007), $p=0.003$), waist circumference (β (SE)=0.007 (0.003), $p=0.04$) and tetracycline use (β (SE)=0.291 (0.133), $p=0.03$) were associated with logarithmically transformed PAI-1 levels. Population grouping did not influence these relationships (interaction $p>0.8$) but impacted rheumatoid factor (RF) positivity- and azathioprine use-PAI-1 level associations (interaction $p=0.03$ and 0.004 , respectively). In stratified analysis, RF positivity was associated with PAI-1 levels in white (β (SE)=0.344 (0.139), $p=0.01$) but not black patients (β (SE)=0.102 (0.143), $p=0.5$), and azathioprine use was associated with PAI-1 levels in black (β =0.400 (0.155), $p=0.01$) but not white patients (β (SE)=0.305 (0.184), $p=0.1$). In age, sex, BMI, RF positivity and azathioprine and tetracycline use adjusted analysis, black population origin remained associated with PAI-1 levels (β (SE)=0.175 (0.091), $p=0.05$). In age and sex adjusted analysis, TFPI and t-PA levels did not differ in black compared to white RA patients (median (IQR)=221.0 (149.8-410.5)

versus 225.0 (130.4-357.2) pg/ml, $p=0.6$, and 6.7 (4.9-9.1) versus 7.4 (4.4-10.0) pg/ml, $p=0.3$).

Conclusion: PAI-1 concentrations are substantially larger in African black compared to white patients with RA.

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7586

AB0312 CARDIOVASCULAR RISK FACTOR'S BEHAVIOR AND CARDIOVASCULAR RISK IN HISPANIC EARLY RHEUMATOID ARTHRITIS PATIENTS: A COHORT STUDY

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Background: Rheumatoid arthritis (RA) patients present an increased risk of cardiovascular (CV) morbidity and mortality compared to the general population¹. Patients from Latin-America exhibit younger age, female preponderance, less severe disease and dyslipidemia, which are relevant when assessing CV risk². In order to impact CV morbidity/mortality, control of reversible CV-risk factors need to be achieved³. Cohorts allow prospective evaluation of long-term outcomes. In 2004 we initiated an early RA cohort. Up to June 2018, the cohort comprised 185 RA patients with prospective assessments of CV risk and at least one year of follow-up.

Objectives: To monitor CV risk-factor's behavior during the first year of follow-up and to identify if traditional CV risk scores predict major CV events (MACE) in our population.

Methods: Once enrolled patients had complete rheumatic evaluations at regular intervals. Baseline CV-risk factor's assessments included age, gender, ethnicity, physical activity and history of first-degree relatives with premature heart disease. CV-risk factors assessments at baseline and at least 6 months apart included blood pressure, serum total cholesterol (CHO) and HDL cholesterol (Castelli ratio CHO/HDL was derived), serum glucose (GLU, in mg/dL), body mass index (BMI), CRP (in mg/dL) and (at least) the following comorbidities: Hypertension (HT), and HT treatment, diabetes mellitus (DM), advanced chronic kidney failure (CKF) and atrial fibrillation (AF). Smoking status was assessed at baseline and last follow-up. Incident MACE were defined according to standard definitions⁴. Cox regression's model identified predictors of incidental MACE. Patients gave written informed consent.

Results: At cohort entry, the 185 patients (all Hispanic) which data were analyzed were primarily middle-aged females (87.6%) and had 5.3 months (3.3-7.1) of disease duration. Most prevalent CV risk factors were CRP >1 mg/dL (90%), Castelli ratio > 3 (84%) and low HDL levels (74%). During the first year of follow-up, smoking status, systolic blood pressure ≥ 140 mm Hg, diastolic blood pressure ≥ 90 mm Hg, low HDL, Castelli ratio > 3, high CRP and patients with active disease progressively decreased; meanwhile, the opposite figure was true for BMI ≥ 30 kg/m² and patients on corticosteroids. At 12 months of follow-up, number of patients with incident CV risk factor was higher for Castelli-ratio > 3 (23%), low HDL (16.3%), high CHO (10.6%), BMI ≥ 30 kg/m² (10%), CRP >1 mg/dL (7.5%) and age ≥ 45 years old (3.3%).

During the first year of follow-up, 45.8% of the patients had age between 40-79 years old, required to apply American Heart Association (AHA) criteria; these identified 12 patients with high CV-risk.

Up to June 2018, the cohort had 1358 patient/years follow-up and 6 patients had incidental MACE after (median, IQR) 6.5 years of follow-up (3.3-9.5). High CV-risk score at baseline failed to predict incidental MACE. Meanwhile, BMI ≥ 30 kg/m² was a predictor of incidental MACE in our population.

Conclusion: Hispanic RA patients from an early RA cohort present a distinctive pattern of CV risk factors. Due to younger age at RA presentation, a minority of the patients had CV risk scored. Obesity was a predictor of incidental MACE in our population.

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Acknowledgement: None

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.406

AB0313

THE PREDICTORS OF UNDIAGNOSED DYSGLYCAEMIA IN PATIENTS WITH ESTABLISHED RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is a chronic inflammatory disease with an increased risk of diabetes and insulin resistance.^{1, 2} The prevalence of type 2 diabetes mellitus (T2DM) were demonstrated to be 10.4% as compared to only 7.6% in 1:4 controls matched for age, sex and geographical region, with an odds ratio of 1.4.³

Objectives: To determine the prevalence of dysglycaemia (T2DM, impaired fasting glucose (IFG) and impaired glucose tolerance (IGT)) and the factors associated with dysglycaemia in patients with established RA.

Methods: This is a cross-sectional study conducted in a rheumatology centre in Malaysia. Patients with established RA aged 30 years or more were included. Exclusion criteria were overlap syndrome, pre-existing diabetes or pre-diabetes, pregnant and within 6 weeks of post-partum period. An oral glucose tolerance test (OGTT) was performed for all patients. Comparison of various factors between dysglycaemia and normoglycaemia were analysed. Multivariate analysis was performed using logistic regression analysis to ascertain the true effects of significant factors found on univariate analysis.

Results: The mean age of patients was 57.2 ± 8.1 years and 87.7% were female. Of 155 patients included in this study, 55 (35.5%) were found to have dysglycaemia; 40 (72.7%) had IGT, 11 (20%) had T2DM, 3 had IFG and IGT (5.5%) and 1 had IFG (1.8%). Significant factors between dysglycaemia and normoglycaemia is tabulated in Table 1. The predictors of dysglycaemia were previous or current smoker (OR 4.28, 95% CI 1.02 – 17.90) and raised triglycerides (OR 3.29, 95% CI 1.29 – 8.37).

Conclusion: One third of 155 patients had dysglycaemia and majority had IGT. The predictors of dysglycaemia in patients with established RA aged 30 years and more, were previous or current smoker and raised triglycerides.

Table 1. Factors investigated for differences between dysglycaemia and normoglycaemia.

Risk factors	Dysglycaemia n=55	Normoglycaemia n=100	p-value
Previous or current smoker, n (%)	7 (13.0)	3 (3.0)	0.02
Waist circumference (cm), mean ± SD	89.0 ± 12.5	83.1 ± 9.6	<0.01
Weight (kg), mean ± SD	65.5 ± 12.3	60.7 ± 10.6	0.01
Systolic blood pressure (mmHg), mean ± SD	134.5 ± 17.5	128.2 ± 18.1	0.04
Diastolic blood pressure (mmHg), mean ± SD	79.7 ± 8.7	76.3 ± 10.5	0.04
High density lipoprotein (mmol/L), mean ± SD	1.4 ± 0.3	1.5 ± 0.4	0.02
Triglycerides (mmol/L), mean ± SD	1.3 ± 0.5	1.1 ± 0.5	<0.01

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Acknowledgement: We would like to thank the Rheumatology team in Hospital Selayang and the Director General of Ministry of Health Malaysia for allowing us to conduct this study in Hospital Selayang.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.5602

AB0314

QUALITY OF LIFE IN WOMEN WITH RHEUMATOID ARTHRITIS DEPENDING ON ANXIETY AND DEPRESSION

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Background: Rheumatoid arthritis (RA) is a chronic autoimmune disease that causes joint damage, deformity, and pain. This can lead to loss of functionality and mobility, which entails a decrease in the quality of life and the possible occurrence of anxiety and depressive disorders[1].

Objectives: Assess the quality of life in women with RA, depending on the severity of anxiety and depression.

Methods: The study included 104 women with reliable RA according to the ACR1987 and/or EULAR/ACR2010 criteria (mean age 53.7 ± 10.9 years, mean duration of RA – 10.1 [4;14] years, DAS28 – 4.96 [4.27;5.77]). An assessment of the severity of anxiety and depression was conducted using a questionnaire for the hospital scale of depression and anxiety (HADS). Evaluation of the quality of life of patients with rheumatoid arthritis was performed using the EQ-5D index. Depending on the degree of functional impairment, according to the HAQ questionnaire, were regarded as minimal (0.5-1 point), moderate (1-2) and pronounced (2-3 points), the population norm was 0-0.5 points. The severity of pain was determined by VAS: no pain (0–4 mm), mild pain (5–44 mm), moderate pain (45–74 mm), severe pain (75–100 mm). Statistical processing was performed using the program STATISTICA 10.0.

Results: The frequency of occurrence of anxiety-depressive disorders in patients with RA was determined: clinically significant anxiety was detected in 20 (19.2%) patients, depression - in 19 (17.3%); subclinical anxiety - in 26 (25%), depression - in 27 (25.9%) patients; the absence of reliably expressed symptoms of anxiety in 58 (55.8%) patients, depression - in 59 (56.8%) patients.

HAQ functional impairment was absent in 11 (10.6%) patients, minimal impairment was detected in 20 (19.2%), moderate - in 52 (50%), and pronounced in 21 (20.2%) patients.

Severe pain in the VAS was noted by 38 (36.6%) patients, moderate - 51 (49%), in 15 (14.4%) patients the pain syndrome was weakly expressed.

The HAQ and EQ-5D indices for women were 1.26 [0.88;1.75] and 0.41 [0.07;0.59], respectively. The relationships between the HAQ and EQ-5D indices ($r = 0.67$, $p < 0.05$), the HAQ index and the age of the patients ($r = 0.33$, $p < 0.05$), and the duration of the disease ($r = 0.29$, $p < 0.05$), ESR indicator ($r = 0.28$, $p < 0.05$), CRP ($r = 0.37$, $p < 0.05$), the level of pain in VAS ($r = 0.4$, $p < 0.05$), DAS28 index ($r = 0.32$, $p < 0.05$), anxiety severity ($r = 0.22$, $p < 0.05$), depression severity ($r = 0.31$, $p < 0.05$). The relationship between the EQ-5D index and the age of the patients ($r = 0.29$, $p < 0.05$), with the duration of the disease ($r = 0.22$, $p < 0.05$), CRP ($r = 0.32$, $p < 0.05$), the level of pain in VAS ($r = 0.45$, $p < 0.05$), the severity of anxiety ($r = 0.28$, $p < 0.05$), the severity of depression ($r = 0.35$, $p < 0.05$).

To clarify the relationship between the quality of life of patients and the level of depression and anxiety, two groups were identified: no anxiety-depressive disorders (N = 43) and the second group with their presence (N = 30). The EQ-5D index in the first group was 0.59 [0.52; 0.62] and in the group with anxiety and depressive disorders it was 0.27 [-0.02; 0.52] ($p = 0.005$). The HAQ index significantly differed in women without anxiety and depressive disorders 1.0 [0.625; 1.5] with the index in the other group 1.75 [1.0; 2.125] ($p = 0.01$).

Conclusion: Thus, every fifth patient with RA suffers from clinically significant anxiety and depression; subclinical anxiety and depression were found in 26% of patients with RA. Interrelations between the indicators of quality of life of patients with RA and the patient's age, duration, activity of RA, severity of anxiety and depressive disorders.