thicker among RA patients with rheumatoid factor (RF) positive (p=0.015, CI:0.53–0.66), LAD coronary artery wall thickness was increased in early RA compared to controls (0.61±0.04 mm (CI:0.52–0.70); and 0.48±0.08 mm (CI:0.44–0.51), respectively), p=0.001.

Conclusions: Early RA patients have increased coronary arteries atherosclerotic burden compared to controls matched for age, and sex. Rheumatoid factor positivity, high Disease Activity Score and Patient Global Assessment of disease activity were associated with coronary wall thickness.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.4254

AB0404

APELIN CONCENTRATIONS ARE ASSOCIATED WITH A REDUCED LEFT ATRIAL VOLUME INDEX AND IMPROVED SYSTOLIC FUNCTION IN PATIENTS WITH RHEUMATOID ARTHRITIS

S. Gunter1, C. Robinson2, L. Tsang3, P.H. Dessein4, A.M. Millen1, 1Cardiovascular Pathophysiology and Genomics Research Unit, University of Witswatersrand, Johannesburg, South Africa; 2Free University Brussels, Brussels, Belgium

Background: We recently reported that apelin concentrations are associated with reduced atherosclerosis and plaque vulnerability as well as improved aortic function in rheumatoid arthritis (RA).2-3 Besides protecting against atherosclerosis, apelin is also a vasoactive peptide that improves cardiac contractility. In this regard, patients with RA experience a 2-fold increased risk of developing heart failure2. RA patients often demonstrate diastolic dysfunction and heart failure with a preserved ejection fraction (HFpEF). Traditional cardiovascular risk factors do not fully explain the increased heart failure incidence in this population. Metabolic risk factor driven inflammation is highly implicated in HFpEF.

Objectives: This study aimed to determine whether apelin can impact left ventricular function in RA and whether disease characteristics can modify this potential effect.

Methods: Relationships of apelin concentrations with echocardiographically determined markers of systolic and diastolic function including stroke volume, endocardial fractional shortening, midwall fractional shortening, ejection fraction, relative wall thickness, left ventricular mass, mitral inflow (E/A), filling pressure (E/e’) and left atrial volume index (LAVI) were determined using multivariable regression models among 165 patients without established cardiovascular disease.

Results: In demographic characteristic adjusted analysis, rheumatoid factor (RF) positivity, joint deformity counts, and CRP were associated with increased apelin concentrations (p=0.01, 0.02 and 0.05, respectively). Apelin was associated with a reduced LAVI [beta(SE)=−4.6 (2.2); p=0.04] but not with E/A, lateral e’ or E/e’ (p>0.05 for all). RA characteristics including disease duration, CRP, erythrocyte sedimentation rate (ESR), RF positivity, and joint deformity counts did not impact apelin concentration-diastolic function marker relationships (interaction p values>0.05). Apelin levels were associated with increased endocardial fractional shortening [beta(SE)=−5.99 (2.97); p<0.04] and midwall fractional shortening [beta(SE)=−6.92 (3.0); p=0.03]. The ESR and anti-citrullinated peptide antibody (ACPA) status impacted the apelin level-endocardial fractional shortening relationships (interaction p=0.05 and 0.01, respectively). In stratified analysis, apelin concentrations were associated with improved endocardial fractional shortening in those with [beta(SE)=−14.1 (3.9); p<0.001] but not without an ESR >12 mm/hr (median value), and in those with [beta(SE)=−8.2 (3.7); p=0.03] but not without ACPA positivity.

Conclusions: In RA, apelin concentrations are associated with a reduced LAVI irrespective of RA activity and severity characteristics. Apelin concentrations are also associated with improved endocardial fractional shortening in patients with RA, particularly in those with high-grade inflammation and ACPA positivity. Whether apelin can improve left ventricular systolic and diastolic function in RA merits further exploration in longitudinal studies.

REFERENCES:

Disclosure of Interest: None declared


AB0405

CLINICAL FEATURES AND PROBLEMS OF ELDERLY ONSET RHEUMATOID ARTHRITIS IN ULTRA-AGEING SOCIETY–SINGLE CENTRE RETROSPECTIVE COHORT STUDY

T. Kurasawa, Y. Okada, A. Shibata, S. Saito, K. Chino, A. Okuyama, H. Takei, T. Kondo, K. Amano, Department of rheumatology and clinical Immunology, Saitama Medical Center, Saitama Medical University, Kawagoe, Japan

Background: Japan is the ultra-aging society ahead of any other country in the world, which ageing rate (the ratio of the population aged 65 and older to the total population) was reported to be 27.3% on October 1, 2016. The rate of aged patients, who followed up at the division of rheumatology in Saitama medical centre, had exceeded 40%.

Objectives: The aim of our study is to reveal recent clinical features and problems of elderly onset rheumatoid arthritis (EORA) patients for better management.

Methods: Patients had a diagnosis by 1987 classification criteria or 2010 ACR/EULAR criteria. We firstly listed up RA patients who were followed up our hospital from April 1 to September 30, and above aged 65 years old as of September 30. Then we retrospectively collected clinical information of EORA patients who onset
AB0407 THE IMPACT OF DEPRESSION ON SOCIAL CONTACTS OF PATIENTS WITH REUMATOID ARTHRITIS

T. Jankovic, J. Zvekic Svorcan. Rheumatology, Faculty of Medicine, University of Novi Sad Special Hospital for Rheumatic Diseases, Novi Sad, Serbia

Background: Rheumatoid arthritis (RA) affects the psychological and emotional state of the patient, leading to a significant reduction in the quality of life and social contacts.

Objectives: Assess the occurrence and degree of depression in RA patients and their impact on quality of life and social contacts.

Methods: The study involved 110 patients, 78.4% women and 22.6% men, with RA of median age 58.7. The average disease duration was 13.6 years. 68% of patients were treated with methotrexate monotherapy (MTX), 32% by combination of MTX and other DMARD. The disease activity in patients was determined by the index DAS28, the functional status -HAQ-DI questionnaire. The intensity of the pain was determined using a visual analogue scale for VAS pain (0–100 mm). The degree of radiological changes was determined based on the classification by Steinbrocker. Patients completed a questionnaire related to the quality of social relationships. The degree of depression was determined using Bäck scale for depression.

Results: The incidence of depression had 65.4% of the patients. A mild degree of depression was observed in 26.4%, moderate 24%, expressed 13% while 2% of the patients had a more severe degree. There was a significant statistic correlation between the degree of depression with age, the duration of the disease, the high degree of DAS28, HAQ-DI, VAS pain and the degree of radiological changes. By analysing the quality of life and social contact, patients in 62% were supported by a close family and a spouse, 28% of their close relatives, 7% of the wider family, while 3% of the patients lived alone.

Conclusions: Depression is the most common and most important psychological state that occurs in patients with RA. It is important to recognise and start treatment on time, which should be based on a multidisciplinary approach. In addition to family support, overall social support also takes a significant place.