are additionally controlled for age, sex, smoking (y/n), drinking alcohol (y/n), sport (y/n).
Conclusions: This study showed that HAQ and SF-12 were related to adherence and health literacy. This finding highlights the importance of patient education and counseling in order to increase both, medical understanding and adherence to therapy.
Acknowledgements: The TRACE-Study was sponsored by an unrestricted grant from Chugai.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.5415

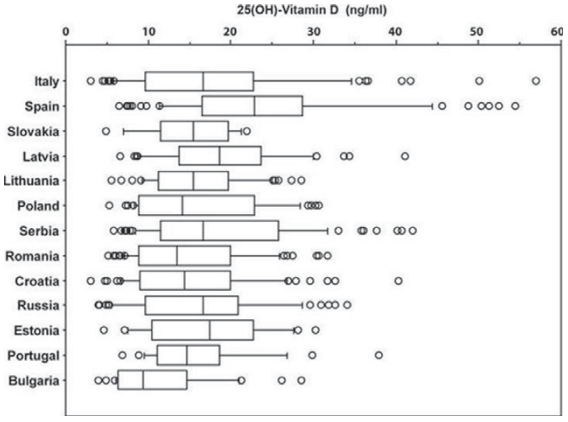
THURSDAY, 15 JUNE 2017

Rheumatoid arthritis - comorbidity and clinical aspects

THU0116 EUROPEAN MULTICENTRE PILOT SURVEY TO ASSESS VITAMIN D AND CLINICAL STATUS IN RHEUMATOID ARTHRITIS PATIENTS

M. Cutolo[1], J. Vojinovic[2], A. Tincani[3], S. Soldano[1], L. Andreoli[3], F. Dall'Ara[3], F. Salaffi[4], R. Ionescu[5], K. Simic Pasalic[6], I. Balcune[7], I. Ferraz-Amaro[8], M. Tlustochowicz[9], I. Butrimiene[10], E. Punceviciene[10], N. Toroptsova[11], S. Grazio[12], J. Morovic-Vergles[13], P. Masaryk[14], K. Otsa[15], M. Bernardes[16], V. Boyadzhieva[17], A. Sulli[1]. *[1]Research Laboratory and Academic Division of Clinical Rheumatology, Department of Internal Medicine, University of Genova, Genoa, Italy; [2]Clinical Centre, Medical Faculty, University of Nis, Nis, Serbia; [3]Rheumatology and Clinical Immunology Unit, University of Brescia, Brescia; [4]Clinical Rheumatology, Università Politecnica delle Marche, Ancona, Italy; [5]Division of Rheumatology, University of Medicine and Pharmacy, Bucharest, Romania; [6]Institute of Rheumatology, University of Belgrade, Belgrade, Serbia; [7]Division of Rheumatology, Paula Stradina Clinical Hospital, Riga, Latvia; [8]Division of Rheumatology, Hospital Universitario de Canarias, Tenerife, Spain; [9]Department of Internal Medicine and Rheumatology, Military Institute of Medicine, Warszawa, Poland; [10]Centre of Rheumatology, Vilnius University Hospital, Vilnius, Lithuania; [11]Department of Epidemiology and Genetics of Rheumatic Diseases, Institute of Rheumatology, Moscow, Russian Federation; [12]University Department for Rheumatology, Physical and Rehabilitation Medicine, Clinical Hospital Centre Sisters of Mercy; [13]Division of Clinical Immunology and Rheumatology, University of Zagreb, Zagreb, Croatia; [14]National Institute of Rheumatic Diseases, Piestany, Slovakia; [15]Department of Rheumatology, Tallinn Central Hospital, Tallin, Estonia; [16]Rheumatology Department of São João Hospital Center, University of Porto, Porto, Portugal; [17]Clinic of Rheumatology, University Hospital St. Iv. Rilski, Sofia, Bulgaria*

Background: Vitamin D (25(OH)D) deficiency seems a distinct risk factor influencing prevalence and severity of several autoimmune diseases. Several studies suggest that low serum concentrations of vitamin D are frequent in rheumatoid arthritis (RA) patients, and an inverse relationships have been reported between 25(OH)D serum concentrations and disease activity or disability.
Objectives: European multicentre cross-sectional study to collect data on vitamin D serum concentrations in RA patients from different countries, and to investigate the relationship with disease activity, disability and quality of life in a large population.
Methods: The survey involved 625 RA patients (mean age 55±11 years, mean disease duration 11±9 years) and 276 age and sex-matched healthy subjects from 13 European countries. Serum samples for 25(OH)D measurement were collected during winter time (December-March) and analyzed in a central laboratory using chemiluminescence immunoassay (DiaSorin). Thirty-six percent of RA patients were treated with vitamin D analogues. Patient past medical history, Rheumatoid Arthritis Impact Diseases (RAID) score, Health Assessment Questionnaire (HAQ) and DAS28-CRP were also collected. Statistical analysis was performed by non parametric tests.



Results: Mean serum concentration of 25(OH)D was found significantly lower in RA patients (17.6±9.7 ng/ml) when compared to matched controls (18.9±9.4 ng/ml) (p=0.01), Several statistically significant differences between European countries were observed (possibly linked to different latitude, sun exsposure and dietary habits) (see figure). Vitamin D deficiency (<20 ng/ml) was found in almost 66% of RA patients, and severe deficiency (<10 ng/ml) was detected in almost 25% of them; insufficiency (between 20 and 30 ng/ml) was found in 27% of RA patients. Only 6% of the RA patients were found within the normal concentrations (>30 ng/ml). Male and female RA patients showed similar 25(OH)D values. Negative statistically significant correlations were found between 25(OH)D serum concentrations and RAID (p=0.05) HAQ (p=0.04) and DAS28-CRP (p<0.001) scores in the RA patients group.
Conclusions: This European survey add new evidences that vitamin D insufficiency/deficiency is frequent in RA patients with statistically significant differences between several countries. Vitamin D serum concentrations negatively correlate with the clinimetric indexes for disease activity, disability and quality of life in the present cohort of RA European patients.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.5977

THU0117 INDEPENDENT ASSOCIATIONS OF DISEASE CHARACTERISTICS AND CARDIOVASCULAR RISK FACTORS WITH LEFT VENTRICULAR DIASTOLIC FUNCTION IN RHEUMATOID ARTHRITIS

A.M. Millen[1], L. Mokotedi[1], S. Gunter[1], C. Robinson[1], G.R. Norton[1], A.J. Woodiwiss[1], L. Tsang[1], P.H. Dessein[1,2]. *[1]Cardiovascular Pathophysiology and Genomic Research Unit, School of Physiology, University of the Witwatersrand, Parktown, Johannesburg, South Africa; [2]Rheumatology Division, Universitair Hospital Brussel, Brussels, Belgium*

Background: Heart failure contributes to the excess mortality experienced by patients with rheumatoid arthritis (RA) (1). Impaired diastolic function represents a pre-clinical cardiac alteration which is highly predictive of cardiac events and often progresses to heart failure. Diastolic dysfunction is the most common cause of heart failure in patients with a preserved ejection fraction. Whereas RA is associated with an increased prevalence of impaired diastolic function (2,3), the pathophysiological mechanisms that mediate this comorbidity await further elucidation.
Objectives: This study aimed to identify potential determinants of ventricular (LV) diastolic function in patients with RA.
Methods: LV diastolic function was determined in 176 patients with RA; 9 patients had established cardiovascular disease. LV diastolic function was determined by echocardiography from the ratio of early-to-late transmitral blood flow velocity (E/A), the ratio of E to the mean of the lateral and septal wall myocardial tissue lengthening at the mitral annulus (e') (E/e'), and the lateral e'. Relationships of comprehensively evaluated traditional cardiovascular risk factors and RA characteristics with markers of LV diastolic function were determined in confounder adjusted multivariate regression models.
Results: Disease duration (partial r=-0.23, p=0.00), rheumatoid factor status (partial r=-0.16, p=0.04) and erythrocyte sedimentation rate (partial r=-0.16, p=0.04) were associated with lower logarithmically transformed (log) E/A. Upon further adjustment for left ventricular mass index or relative wall thickness, these relationships remained significant (p≤0.05). Diastolic blood pressure was related to log E/e' (partial r=-0.16, p=0.04); this association was no longer significant after additional adjustment for left ventricular mass index (p=0.06) or relative wall thickness (p=0.06). Disease duration (partial r=-0.32, p=0.00), waist-to-hip ratio (partial r=-0.29, p=0.00) and triglycerides (partial r=-0.17, p=0.03) were related to log lateral e'. These relationships remained significant upon further adjustment for left ventricular mass index (for all p=0.00) or relative wall thickness (for all p=0.00). In sensitivity analysis among RA patients without established cardiovascular disease (n=167), the results were not materially altered.
Conclusions: Modifiable traditional cardiovascular disease risk factor and disease characteristics are consistently associated left ventricular diastolic function in RA.
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Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.4205