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was significantly higher compared to patients in GCPT group $-\,7\,$ (10.3%) and 6 (8.8%) respectively (p=0.038 and p=0.049). Baseline C-peptide was elevated in patients who developed IGT after a course of GCPT (850 pmol/l before GCPT, 4099 pmol/l 4-6 hours after GCPT and 1904 pmol/l after a 3-days course of GCPT) or DM (1050 pmol/l, 3170 pmol/l and 1796 pmol/l before GCPT, at peak blood glucose level and after a 3-days course of GCPT, respectively) (p<0.05). C-peptide remained normal in the absence of CMD and in IGT patients.

Baseline HOMA-IR index was elevated in patients with IGT (4.52, 17.47, 9.67 before GCPT, at peak blood glucose level and after a 3-days course of GCPT, respectively) and DM (5.04, 15.2, 10.4 respectively) (p<0.05), and normal in patients without CMD (2.2, 5.84 and 4.01 respectively) and patients with impaired fasting glucose (IFG) (2.46, 7.08 and 5.46).

HOMA-islet index analysis revealed that in the absence of CMD and at earlier stages of CMDs (IFG, IGT) insulin resistance is compensated via an increase of β -cell secretory activity. In DM patients there is a trend towards decreased β -cell secretory activity, which is associated with a significant decrease of HOMA-islet index to 64,6 at peak blood glucose levels after GCPT compared to baseline level (170) (p<0.05). C-peptide, HOMA-IR and HOMA-islet index levels in OGCT patients demonstrated same trend as in GCPT patients. Significant differences were observed in patients with IGT and DM before and after oral glucose tolerance test (OGTT) on C-peptide (1042 pmol/l vs. 1978 pmol/l in IGT; 1306 pmol/l vs. 2286 pmol/l in DM) and HOMA-IR (4.53 vs. 9.81 in IGT; 5.6 vs. 11.27 in DM patients), whereas in patients without CMD and in patients with IFG, C-peptide before OGTT was 489 pmol/l vs. 743 pmol/l, after - 1295 pmol/l vs. 1488 pmol/l, HOMA-IR - 2.59 vs. 2.88 before OGTT and 2.88 vs. 5.85 after the test in the absence of CMD and in IFG patients, respectively. A significant decrease of β -cell function was observed in DM patients, reflected by a decrease of HOMA-islet after OGTT compared to baseline (147 vs. 78.4).

Conclusions: GCT leads to IGT and DM in patients with increased IR both during GCPT and long-term OGCT. Long-term OGCT is associated with more CMDs compared to GCPT.

Disclosure of Interest: None declared DOI: 10.1136/annrheumdis-2017-eular.5748

AB0324 IS LOW SERUM VITAMIN D LEVEL ASSOCIATED WITH INCREASED NEUROPATHIC PAIN IN RHEUMATOID ARTHRITIS PATIENTS? A CROSS-SECTIONAL STUDY

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Background: Rheumatoid arthritis (RA) is a systemic, autoimmune, progressive condition characterised by progressive synovitis with resultant joint destruction, functional disability and significant pain. Recent experimental data indicates that there may be a neuropathic component of pain perception in RA.

Objectives: The aim of this study was to examine the development of neuropathic pain (NP) in patients with RA and its relationship with vitamin D.

Methods: We used the Leeds assessment of neuropathic symptoms and signs (LANSS) questionnaire to evaluate NP in 93 patients with RA. Clinical parameters included general demographics, and disease activity scores were evaluated. The patients also completed Short form-36 survey, and Health Assessment Questionnaire

Results: Of all the patients who were eligible for the study, 75 were female (80.6%). Mean serum vitamin D level of the participants was calculated to be 22.8±11.9 ng/mL. According to the LANSS questionnaire 31 patients (33.3%) were classified as having NP. There was a negative correlation between vitamin D levels and LANSS value (p=0.001). We have determined that patients with vitamin D serum levels below 20 ng/mL have significantly higher NP positivity rate (p=0.012), besides they have 5.8 times more risk of developing NP when compared to patients with vitamin D serum levels ≥30 ng/mL.

Conclusions: We conclude that Vitamin D deficiency is prevalent in RA patients with NP. Once it is the right diagnosis, Vitamin D deficiency treatment is relatively easy, safe, inexpensive and with satisfactory outcomes; therefore, an underlying vitamin D deficiency should be explored in the etiology of NP in patients with RA.

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AB0325 TREAT TO TARGET AND THE REAL LIFE EXPERIENCE – DATA FROM A COHORT OF RHEUMATOID ARTHRTIS PATIENTS IN SOUTH EAST ROMANIA (CONSTANTA COUNTY)

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Background: Treatment target in rheumatoid arthritis (RA) is remission or low disease activity. Considering that there is no quantitative "gold standard " for measuring the disease activity, monitoring and evaluation of RA patients is made through composite scores, which have an important subjective component. Moreover, the laboratory investigations used (ESR and CRP) are commonly discordant with the clinical findings

Objectives: To evaluate disease activity and establish relations between disease activity scores and their components in RA patients

Methods: We performed a transversal study which included 447 RA patients (aged 18 to 86-years-old) admitted to our Rheumatology Department between January 2014 and December 2015. Patients' evaluation was performed by the rheumatologist. All the data obtained from the medical history, clinical examination, laboratory tests and imaging studies was recorded at the same date. All patients signed a dated informed consent at the time of admission.

Results: The study included 447 patients, mean age 62.13±11.44, 85% women, accounting for a female:male ratio (F:M) of almost 6:1 (5.7:1) with an average disease duration of 10,75±8,85 years. 48% of our patients presented with normal CRP values (≤0.5mg/dl) and values of ≤1mg/dl for CRP, compatible with Boolean remission, were present in 66.6% of the patients. A significant percentage of our sample population (194 patients: 43.4%) registered normal ESR values (≤28

Remission and LDA were registered in 18.1% up to 29.8%.of the patients, depanding on the score used. The lowest rate of remission and low activity is registered through the DAS28 ESR evaluation (18.1%). The other three scores outline similar percentages for T2T group of patients: 27.1% (SDAI), 28.7% (CDAI), and 29.7% (DAS28 CRP). The LDA group is characterized in our study by a small number of swollen joints (<1), medium-normal ESR values (<30mm/h) and CRP values <1mg/dl (with the exception of SDAI). Consequently, patients with low activity based on the afore mentioned scores meet remission according to Boolean definition.

Conclusions: The disease activity and implicitly the remission rate are appreciated differently depending on the scale used. The limit between remission and low disease activity is fragile, influenced mainly by the purely subjective components of the assessment instruments. The important differences between the subjective and objective components of the evaluation scales recommend the supplementation of methods used in order to emphasize the real degree of joint inflammation.

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AB0326

INFLUENCE OF NONSTEROIDAL ANTI-INFLAMMATORY DRUGS ON ARTERIAL STIFFNESS IN PATIENTS WITH RHEUMATIC DISEASES

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Background: The association with adverse cardiovascular (CV) events and NSAIDs has been the topic of much debate.

Objectives: The aim of the present study was to investigate the effects of continuing NSAIDs therapy on predictable parameters for CV events.

Methods: We enrolled 155 patients with variable rheumatic diseases (95 rheumatoid arthritis, 49 systemic lupus erythematosus, 3 behçet's disease, 3 gout, 5others.) who were free from established CV diseases and had taken cardiovascular function tests from June 2015 to June 2016. They were divided into two groups depending on whether or not to have taken NSAIDs therapy for at least 5 years: NSAIDs taking group (91 patients) vs. non NSAIDs taking group (64 patients). For evaluating heart function, transthoracic echocardiography was used. Arterial stiffness was assessed using brachial-ankle pulse wave analysis.

Results: There were no significant differences in blood pressure, serum creatinine, serum hemoglobin, total cholesterol, erythrocyte sediment rate, C-reactive protein, disease duration, age, and smoking history between the groups. The NSAIDs Scientific Abstracts 1163

taking group had a higher median (95% CI) baPWV (brachial-ankle pulse wave velocity) and median (95% CI) mean pulmonary artery pressure (mPAP) than non-NSAIDs taking group: baPWV 13.72 (12.77–15.62) vs. 15.29 (13.93–17.63) m/s, p=0.005; mPAP 26.5 (22.8–30.5) vs. 30.5 (27.3–32.3) mmHg, p=0.011. But baPWV and mPAP were not significantly different between selective cyclooxygenase-2 inhibitor (22 patients) and nonselective NSAIDs (69patients): baPWV 15.33 (13.98–17.63) vs. 14.83 (13.82–17.39) m/s, p=0.191; mPAP 29.0 (24.5–34.5) vs. 30.0 (26.0–33.0) mmHg, p=0.960.

Conclusions: Our study suggests that continuing NSAIDs therapy is associated with increased arterial stiffness in patients with rheumatic diseases, independently noted to increase the incidence of cardiovascular disease.

Disclosure of Interest: None declared **DOI:** 10.1136/annrheumdis-2017-eular.2403

AB0327

FEAR OF FALLING AND FOOT PAIN, IMPAIRMENT AND DISABILITY IN RHEUMATOID ARTHRITIS

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Background: Fear of falling, foot pain and functional disability are commonly reported in rheumatoid arthritis. Moreover, the relationship between the fear of falling and foot pain, impairment and disability has rarely been studied.

Objectives: To evaluate the relationship between fear of falling and foot pain, impairment and disability in patients with established RA.

Methods: A cross-sectional study that included patients with rheumatoid arthritis. We collected the following data: age, sex, duration of disease, foot pain assessed by the Visual Analogue Scale (VAS), Disease activity assessed by DAS 28, HAQ disability index (HAQ-DI). Fear of falling was assessed by Falls Efficacy Scale-International (FES-I) which consists of 16 different activities, scored using a four point scale (1=not at all concerned, 2=somewhat concerned, 3=fairly concerned and 4=very concerned). The summed scores for the 16 activities for each participant were calculated. Scores of ≥23 indicated a significant fear of falling. Foot disability and impairment were measured using the Leeds Foot Impact Scale (LFIS), Foot disability was represented by the total score (LFIST; range 0 to 51) of the LFIS and foot impairment by the first subscale (LFISIF; range 0 to 21). Correlations were used to assess the relationship between fear of falling and foot pain, impairment and disability.

Results: Thirty-three patients were included. The mean age was 49.3 ± 10.5 years with female predominance (n=29 (87.9%)). The mean disease duration was 9.9 ± 7.5 years. The mean HAQ-DI was 1.3 ± 0.8 . The mean DAS28 score was 5.5 ± 1.3 and the mean EVA foot pain was 5.5 ± 2.4 . The mean FES-I score was 37.4 ± 15.1 and 69.7% (n=23) of patients had a significant fear of falling. Positive correlations were found between fear of falling and foot impairment (r=0.66; p<0.0001) and disability (r=0.80; p<0.0001). No correlation was found between fear of falling and foot pain (r =0.29, p=0.07).

Conclusions: The results of this study have demonstrated the importance of the relationship between fear of falling and foot impairment and disability.

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AB0328

RHEUMATOID ARTHRITIS AND FEAR OF FALLING: THE INFLUENCE OF DISEASE ACTIVITY

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Objectives: The objective of this study was to evaluate fear of falling in patients with established RA and its relation to disease activity.

Methods: A cross-sectional study that included patients with rheumatoid arthritis.

We collected the following data: age, sex, duration of disease, body mass index (BMI). Fear of falling was evaluated by the Falls Efficacy Scale-International score (FES-I) which consists of 16 different activities, scored using a four point scale (1=not at all concerned, 2=somewhat concerned, 3=fairly concerned and 4=very concerned). The summed scores for the 16 activities for each participant were calculated. Scores of ≥23 indicated a significant fear of falling. Disease activity was measured with swollen and tender joint count (SJC28, TJC28), pain on a visual analogue scale (VAS pain), patient and evaluator global assessment of disease activity (PGA, EGA), HAQ disability index (HAQ-DI), 28-joint DAS (DAS-28) and the clinical and simple disease activity indexes (CDAI, SDAI). Correlations were used to assess the relationship between fear of falling and disease activity.

Results: Thirty-three patients were included. The mean age was 49.3 ± 10.5 years with female predominance (n=29 (87.9%)). The mean disease duration was 9.9 ± 7.5 years.

The mean FES-I score was 37.4 ± 15.1 and 69.7% (n=23) of patients had significant fear of falling. The mean VAS pain was 5.3 ± 2.5 , the PGA was 6.2 ± 2.1 and the EGA was 5.7 ± 1.7 . The mean HAQ-DI was 1.3 ± 0.8 . The mean DAS28 score was 5.5 ± 1.3 . The mean CDAI was 29.9 ± 13.6 and the SDAI was 31.6 ± 13.7 .

FES-I was significantly correlated with TJC28 (r =0.52, p=0.02), PGA (r=0.56, p=0.01), EGA (r=0.39, p=0.025), HAQ-DI (r =0.70, p=0001), DAS28 (r =0, 38, p=0.029), CDAI (r =0.48, p=0.005) and SDAI (r =0.52, p=0.002).

Conclusions: This study suggests that fear of falling is frequent in patients with rheumatoid arthritis and demonstrated that fear of falling is significantly correlated with disease activity.

Disclosure of Interest: None declared **DOI:** 10.1136/annrheumdis-2017-eular.6029

AB0329

DO ANXIOUS OR DEPRESSIVE RHEUMATOID ARTHRITIS PATIENTS ON BIOTECHNOLOGIC THERAPY HAVE WORSE DISEASE ACTIVITY, FUNCTION AND QUALITY OF LIFE?

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Background: Depression, anxiety and fatigue are common symptoms in rheumatoid arthritis (RA) patients, and seem to influence disease activity, pain, quality of life (QoL) and treatment response.

Objectives: To assess disease activity, function and QoL in RA patients with symptoms of anxiety/depression.

Methods: Observational, cross-sectional study including RA patients on bDMARD followed at our centre, registered at Reuma.pt with ≥ 1 evaluation from 2015/11 to 2016/07. Clinical data including DAS28, CDAI, SDAI, TJC, SJC, patients' and physicians' pain/global assessments (VAS), ESR, CRP, HAQ, EQ5D, HADS score (anxiety and depression domains, cutoff ≥ 8) and FACIT-F were collected. Data were analyzed using Mann-Whitney, Qui-Squared and Spearman correlation, p<0.05.

Results: 182 patients enrolled, 84.6% female, mean: age at 1st bDMARD 53.8±11.1; time since diagnosis 16.2±9.3 years; DAS28 3.54±1.3; CDAI 10.2±9.6; SDAI 11.2±10.4; HAQ 0.97±0.6; HADS-Anxiety 7.13±4.5; HADS-Depression 6.62±4.54, FACIT-F 35.1±9.2, EQ-5D 0.36±0.2. 77 (44.5%) patients scored ≥ 8 in the HADS-Anxiety domain and 71 (41.0%) scored ≥ 8 in the HADS-Depression domain. Comparison of depressive vs non-depressive and anxious vs non-anxious groups appears on table 1. There was a correlation of *HADS-Anxiety* with DAS28 (r=0.391, p<0.001), CDAI (r=0.441, p<0.001), SDAI (r=0.426, p<0.001), HAQ (r=0.509, p<0.001), FACIT-F (r=-0.669, p<0.001) and EQ5D (r=-0.389, p<0.001), CDAI (r=0.455, p<0.001), SDAI (r=0.439, p<0.001), FACIT-F (r=-0.679, p<0.001) and EQ5D (r=-0.659, p<0.001).

Abstract AB0329 - Table 1. Comparison of anxious vs non-anxious and depressive vs non-depressive patients

	HADS-A <8	HADS-A ≥8	р	HADS-D<8	HADS-D ≥8	р
N	96	77		102	71	
Gender (M%)	18.8%	9.1%	0.073	18.6%	8.5%	0.061
Age at diagnosis, mean ± SD (years)	44.5±13.2	45.4±12.7	0.606	42.3±12.7	48.5±12.5	0.009
Age at 1st bMARD, mean ± SD (years)	53.6±11.1	54.9±10.0	0.422	52.4±10.3	56.8±10.6	0.008
HADS-A, mean ± SD				4.99±3.5	10.2±4.04	< 0.001
HADS-D, mean ± SD	4.1±3.6	9.6±3.7	< 0.001			
HAQ, mean ± SD	0.75±0.6	1.26±0.6	< 0.001	0.7±0.5	1.3±0.6	< 0.001
DAS28 ESR, mean ± SD	3.1±1.1	4.0±1.4	< 0.001	3.1±1.0	4.1±1.5	< 0.001
28 TJC, mean ± SD	1.83±3.3	4.95±5.8	< 0.001	1.92±3.1	5.08±6.1	< 0.001
28 SJC, mean ± SD	1.02±1.7	1.86±2.7	0.042	0.97±1.5	2.00±2.9	0.020
PGA (VAS), mean ± SD	28.46±23.2	46.3±24.1	< 0.001	28.9±23.03	47.3±24.2	< 0.001
Patients' pain assessment (VAS), mean ± SD	28.4±22.5	46.4±26.2	< 0.001	28.8±22.4	47.3±26.5	< 0.001
PhGA (VAS), mean ± SD	15.9±13.9	23.8±20.6	0.022	14.4±12.7	26.5±20.8	< 0.001
ESR (mm/H), mean ± SD	26.42±19.6	28.43±21.2	0.513	25.3±18.4	30.2±22.6	0.190
CRP (mg/L), mean ± SD	6.9±10.9	9.3±23.5	0.771	6.1±8.9	10.6±25.3	0.808
CDAI, mean ± SD	7.3±7.1	13.8±11.2	< 0.001	7.2±6.4	14.5±11.7	< 0.001
SDAI, mean ± SD	8.2±7.4	14.96±12.4	< 0.001	7.97±6.7	15.8±12.97	< 0.001
FACIT-F, mean ± SD	39.8±7.5	29.3±7.7	< 0.001	39.1±7.8	29.4±8.2	< 0.001
EQ5D, mean ± SD	0.43±0.17	0.28±0.20	< 0.001	0.44±0.17	0.26±0.19	< 0.001