

as much as the least active RA patients, it is difficult for activities in daily life, that the quality of life associated with the illness is low, and that depression and anxiety are similar to employees. As a result, disease activity, quality of life and functional status control in RA patients are as important as those who are working as housewives. Particularly in increasing productivity and participation in everyday life, the mood is influential and physicians must examine their patients in this regard. There is a need for more extensive cohort studies on this topic.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4614

AB1203-HPR **COMPARISON OF QUALITY OF LIFE OF PATIENTS WITH RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS AND ANKILOSING SPONDYLITIS WITH TREATMENT OR PRESCRIPTION OF BIOLOGIC DRUGS: RESULTS FROM THE CARA STUDY**

L. Sinigaglia¹, L. Scalone^{2,3}, P. Sarzi-Puttini⁴, C.M. Montecucco⁵, R. Giacomelli⁶, G. Lapadula⁷, I. Olivieri⁸, A. Giardino⁹, G. Didoni⁹, P. Cortesi^{2,3}, L.G. Mantovani^{2,3}, M. Mecchia⁹ on behalf of CARA study working group. ¹Rheumatology Unit, G. Pini Hospital; ²CHARTA Foundation, Milano; ³University of Milano Bicocca, Monza; ⁴Rheumatology Unit, L. Sacco University Hospital, Milano; ⁵University of Pavia School of Medicine, IRCCS Policlinico San Matteo Foundation, Pavia; ⁶Rheumatology Unit School of Medicine, University of L'Aquila, L'Aquila; ⁷Rheumatology Unit, University of Bari, Bari; ⁸San Carlo Hospital of Potenza and Madonna delle Grazie Hospital of Matera, and the Basilicata Ricerca Biomedica (BRB) Foundation, Italy, Potenza and Matera; ⁹MSD Italia, Roma, Italy

Background: Chronic rheumatic conditions such as rheumatoid arthritis (RA), ankylosing spondylitis (AS), and psoriatic arthritis (PsA) are associated with severe morbidity and significant impairment of patients' health related quality of life (HRQoL). Several treatments are available but not all the patients respond positively to them. Biologic therapies such as anti-TNF α agents are shown to benefit who fail or have partial responses to standard DMARD therapy.

Objectives: Within a multicenter stated preferences study (CARA Study), we assessed HRQoL in patients with RA, AS and PsA, and estimated relationship of HRQoL with the different diagnoses, clinical characteristics and biological treatment experience.

Methods: Patients with RA, AS, or PsA, who at the time of enrollment were following a treatment (experienced) or received a first prescription (naïve) of treatment with biological drugs were enrolled. Together with preferences data, clinical and HRQoL information was reported. HRQoL was assessed with the recently developed and successfully validated version of the EQ-5D-5L, which allows to obtain a description of health (in 5 domains and 5 levels of severity each), a measure (EQ-VAS) and a valuation (utility) of health. Multiple linear regression analyses were conducted to assess the association between EQ-5D VAS score and the utility with age, sex, diagnosis, treatment experience, years from symptoms onset and years from diagnosis.

Results: 513 patients were enrolled (mean \pm SD =50.0 \pm 13.6, 42.5% female). As regards the diagnosis, 33.9% had RA, 34.9% PsA and 31.2% AS. The mean \pm SD time from the symptoms onset was 10.8 \pm 9.4 and from the diagnosis was 8.0 \pm 8.2 years. Almost half of the patients (47.4%) were naïve to the biological treatment. Patients reporting severe or extreme problems were: 7.1% in mobility, 3.6% in self-care, 10.3% in usual activities, 18.6% in pain/discomfort, 5.5% in anxiety/depression. The mean \pm SD of the VAS was 60.4 \pm 20.5 and of the utility was 0.773 \pm 0.116. From the regression model the VAS and utility are significantly ($p < 0.05$) associated with age, sex and treatment experience (table 1). In particular, the patients being naïve to the treatment with biological drugs had on average significant worse levels of HRQoL than experienced patients, adjusting for the other variables included in the model.

Table 1. Results of the regression analyses

Variables	EQ-5D VAS		EQ-5D UTILITY	
	Coeff. Regr	p-value	Coeff. regr	p-value
Constant	92.455	0.000	0.954	0.000
Age	-0.205	0.002	-0.001	0.013
Gender (Female)	-7.473	0.000	-0.055	0.000
Psoriatic arthritis	-3.986	0.063	-0.009	0.448
Ankylosing spondylitis	-4.236	0.076	-0.016	0.228
Naïve patients	-13.873	0.000	-0.074	0.000
Time from symptoms onset	-0.105	0.557	0.000	0.858
Time from diagnosis	0.061	0.768	0.000	0.815

Conclusions: Patients naïve to biological treatment have significant lower levels of HRQoL, suggesting that their current situation is not satisfactory and need to start with a more effective treatment.

Disclosure of Interest: L. Sinigaglia: None declared, L. Scalone: None declared, P. Sarzi-Puttini: None declared, C. Montecucco: None declared, R. Giacomelli Grant/research support from: MSD, G. Lapadula: None declared, I. Olivieri: None declared, A. Giardino Employee of: MSD Italia, G. Didoni Employee of: MSD Italia, P. Cortesi Grant/research support from: Gilead, L. Mantovani: None declared, M. Mecchia Employee of: MSD Italia

DOI: 10.1136/annrheumdis-2017-eular.4904

AB1204-HPR **EVALUATION OF CARBOHYDRATE METABOLISM IN RHEUMATOLOGIC PATIENTS AFTER PULSE THERAPY WITH GLUCOCORTICIDS**

M. Salokhiddinov, A. Tulabaev. *Rheumatology, Tashkent Medical Academy, Tashkent, Uzbekistan*

Background: Chronic inflammation – the crucial pathogenic mechanism of rheumatoid arthritis is the main cause of accelerated atherosclerosis, insulin resistance and well-known consequences related to it. The conservative treatment of rheumatoid arthritis may provide a significant influence on glucose metabolism. When the duration of rheumatic diseases of administration and dosage of glucocorticoids (GC) are significant predictors of the development of impaired glucose tolerance and diabetes mellitus.

Objectives: To study the effect of pulse-therapy (PT) of the GC on the violation of carbohydrate metabolism in patients with rheumatic diseases

Methods: The study included 35 patients (7 men, 18 women) with a variety of rheumatic diseases (systemic lupus erythematosus - 23, systemic vasculitis - 12) between the ages of 18 to 68 years (mean age 42.3 \pm 14.43 years) and duration of disease from 6 months to 12 years (mean 3.55 \pm 3.36 years). Pulse-therapy of GK included intravenous prednisolone 600–1000 mg per day for 3 consecutive days (course dose of 1800–3000 mg). Oral glucose tolerance test (OGTT) was performed after the course. The first group included patients with a normal result of OGTT (glucose concentration of <7.8 mmol/L at 2 hours after taking 75 g of glucose). There were 23 patients in the first group at the age of 18 to 54 years (mean age 38.0 \pm 2.8 years). Patients of the second group level had OGTT was >7.8 mmol/L. This group included 12 people aged from 44 to 61 years (mean age 52.6 \pm 8.4 years). All patients underwent the measurement of blood glucose levels prior to PT, 2, 4, 6, 10, 24, 48 and 72 hours and after the PT

Results: All patients included in the study, after the PT session there was an increase in blood glucose levels with a peak at 4 hours after the start of administration - 12.2 \pm 0.82 in the first group, in the second to 21.95 \pm 0.25 mmol/l ($p < 0.05$). Normalization of glucose levels in the first group of patients occurred within 1.75 \pm 0.18 days (1 to 3), whereas in the second - for 5.0 \pm 1.0 (3 to 5; $p < 0.05$). During the OGTT the mean fasting blood glucose levels in patients with the first group was 4.49 \pm 0.12 mmol/l, and the second - 5.85 \pm 0.35 ($p < 0.05$), after 2 hours - 6.0 \pm 0.21 and 10.0 \pm 1.5 mmol/l, respectively ($p < 0.05$).

Conclusions: Application PT of GC in rheumatic patients causes blood glucose levels to change values, indicating the development of impaired glucose tolerance. Predictors of disorders of carbohydrate metabolism in these patients are high levels of glycemia during the PT more continuous glucose normalization indices after the course PT GC.

References:

- [1] Alekseeva EI. Pulse therapy with glucocorticoids of systemic manifestations of rheumatoid arthritis in children. Questions of modern times. *Pediatrician* 2005;4(1)9–14.
- [2] Lebetis IS, Tolmacheva SR, Shevchenko NS. Modern approaches to the treatment of systemic lupus erythematosus in adolescents. *Wedge. Pediatrician* 2012;6:91–94.
- [3] Omelchenko LI, Nikolaenko VB. Some aspects of improving glucocorticoid therapy in rheumatic diseases in children. *Ukr. Rheumatology* 2010;1:44–49.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.1169

AB1205-HPR **THE EFFECTS OF KINESIOTAPING ON JOINT POSITION SENSE AND POSTURAL STABILITY FOLLOWING FATIGUE PROTOCOL**

O. Aydođdu, Z. Sari, U.S. Yurdalan. *Physiotherapy and Rehabilitation, Marmara University, Health Sciences Faculty, Istanbul, Turkey*

Background: Muscle fatigue is common in sports activities and has been shown to adversely alter proprioception, impair neuromuscular control, and increase the risk of injury. Kinesiotaping has recently gained popularity among sports professionals for its assumed injury prevention and performance enhancement (1). Two studies have reported conflicting findings with respect to the effects of KT on proprioception. Halseth et al reported that KT produced no significant change in the absolute error in ankle joint position sense (2). However, Chang et al reported that KT decreased the force sense error in grip strength measurements among 21 healthy college athletes (3). Thus, the current literature does not provide clear information about the effects of KT on proprioception. Although there are published articles about investigating KT on joint position sense and postural stability, the effects of KT is still unknown after muscle fatigue, to our knowledge.

Objectives: There is a lack of literature examining the KT on joint position sense and postural stability following fatigue protocol. Therefore, the aim of this study was to investigate the effects of KT on knee joint position sense and postural stability after muscle fatigue. It was hypothesized that KT applied on quadriceps femoris muscle would partially compensate for the proprioceptive and balance-related deficits caused by muscle fatigue.

Methods: Thirty – six healthy subjects were evaluated in the study. Knee joint position sense was assessed by Biodex System Pro 4 during active repositioning tests at the target angles of 30°, 50° and 70° of knee flexion in sagittal plane. Postural stability was assessed by Pedalo Sensamove® System in antero –

posterior and medio – lateral plane. Joint position sense and postural stability were assessed three times: during rest, following the fatigue protocol, and following the taping. The subjects were received a clinically-fatigued fatigue protocol on a cycle ergometer. The Modified Borg's Rate of Perceived Exertion Scale has been used for fatigue determination.

Results: Joint position sense and postural stability were significantly decreased following fatigue compared to the condition during rest ($p < 0.05$). However, no significant difference was found in terms of joint position sense and postural stability after taping compared to the condition following fatigue ($p > 0.05$).

Conclusions: The hypothesis of this study, that KT could partially compensate for the proprioceptive and balance-related deficits induced by muscle fatigue, was not supported. According to the results of our study, we concluded that the subjects do not benefit from the use of KT for compensating joint position sense and postural stability in condition following fatigue.

References:

- [1] Yeung SS, Yeung EW, Sakunkaruna Y, et al. Acute effects of kinesio taping on knee extensor peak torque and electromyographic activity after exhaustive isometric knee extension in healthy young adults. *Clin J Sport Med.* 2015 May;25(3):284–90.
- [2] Halseth T, McChesney JW, DeBeliso M, et al. The effects of Kinesio taping on proprioception at the ankle. *J Sports Sci Med.* 2004;3:1–7.
- [3] Chang HY, Chou KY, Lin JJ, et al. Immediate effect of forearm Kinesio taping on maximal grip strength and force sense in healthy collegiate athletes. *Phys Ther Sport.* 2010;11:122–127.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5688

AB1206-HPR ADAPTATION INTO SPANISH OF THE SCLERODERMA HEALTH ASSESSMENT QUESTIONNAIRE (S-HAQ)

P. Quevedo¹, M.A. Rivero¹, N. Perez², H. Laborde², G. Earsman¹, M. Mayer¹, S. Papisidero³, S. Julia³, C. Zaffarana⁴, R. Maldonado⁵, M. Khoury⁶, M. Lara⁷, C. Castell⁷, A. Curti⁷, J.C. Barreira¹, V. Steen⁸. ¹British Hospital; ²Hospital de Clinicas José de San Martín; ³Tornu Hospital; ⁴Psychophysical Rehabilitation Institute (Irep), Buenos Aires; ⁵Padilla Hospital, TUCUMAN; ⁶Statistics, British Hospital, Buenos Aires; ⁷Luis Lagomaggiore Hospital, MENDOZA, Argentina; ⁸Georgetown University, Washington, United States

Background: The Health Assessment Questionnaire (HAQ) is an instrument administered to patients to self-report functional status originally in rheumatoid arthritis (RA). In Argentina, it has been translated and validated for RA in 2004. For diffuse SSc, HAQ has been associated to morbidity and mortality.

Objectives: To adapt S-HAQ into Spanish and to assess its validity in SSc patients in Argentina.

Methods: S-HAQ was translated following a forward-backward translation procedure of the original English version, and transcultural adaptation was performed by a comprehension test reaching the final Spanish version. SSc patients that fulfilled ACR 80 criteria and early Systemic Sclerosis according to Le Roy and Medsger criteria were included. Patients with overlap were excluded. Cronbach's alpha and item-item item-total correlations were used to assess internal consistency. Construction validity was analyzed through factor analysis with Varimax rotation. Continuous variables were compared by t-test, Mann-Whitney or Kruskal-Wallis test, and categorical variables by chi-square or Fisher's test. A value of $p < 0.05$ was considered significant.

Results: 19 An adapted Argentine-Spanish version of S-HAQ was developed. One hundred patients were surveyed; 84% were female, mean age 54 ± 12.8 years and disease duration 8.8 ± 9.1 years. Limited SSc was more frequent (63%), followed by diffuse SSc (36%). Serologically, 89% were ANA positive, 27% had anti Scl 70 and 41% had anti centromere antibodies. Median Rodnan score (mRSS) was 9.8 (0–40.5) and median activity measured by EUSTAR was 1.25 (0–6). Median S-HAQ was 0.62 (0–2.5), Cronbach's alpha 0.89, and when removing questions one by one the coefficient decreased. Median VAS (visual analogue scale) was 0.57 (0–2.8). Factor analysis identified two factors for the S-HAQ: factor 1: dressing (0.61), arising (0.68), reach (0.63), and personal hygiene (0.70); factor 2: eating (0.68), grip (0.72), walking (0.49), usual activities (0.62). For questions, three factors were identified through VAS: factor 1: overall disease severity (0.63) and gastro-intestinal symptoms (0.57); factor 2: Raynaud's (0.66), digital ulcers (0.56); factor 3: respiratory symptoms (0.43). There was a statistically significant association between higher values of S-HAQ and higher values of mRSS (1.1 ± 0.74 vs. 0.64 ± 0.5 $p = 0.002$) and also with seropositivity for anti-Scl 70 ($p = 0.003$). Higher values of total VAS were associated to female gender (0.75 ± 0.5 vs. 0.49 ± 0.71 , $p = 0.01$). There was a significant association between S-HAQ and MEDSGER ($p = 0.04$) and EUSTAR ($p = 0.03$) scores; likewise, between VAS and MEDSGER ($p = 0.00$) and EUSTAR ($p = 0.00$) scores.

Conclusions: A Spanish version of S-HAQ was developed, showing an acceptable reliability and validity.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4025

AB1207-HPR PATIENT SATISFACTION IN A RHEUMATOID ARTHRITIS SPECIALIZED CENTER

S. Henao¹, F. Rodriguez², P. Santos-Moreno³, L. Villarreal⁴, M. Cabrera⁵, A. Malpica⁶, D. Buitrago-Garcia⁶. ¹Patient service; ²Patient Program; ³Rheumatology; ⁴Psychology and processes; ⁵Engineer and processes; ⁶Epidemiology, Biomab, Center for Rheumatoid Arthritis, Bogota, Bogota, Colombia

Background: According to the Beryl Institute's, patient experience (PX) is "the sum of all interactions, shaped by an organization's culture, that influence patient perceptions, across the continuum of care"; nowadays patient satisfaction is considered as one of the quality for performance in health systems (1). In order to provide a multidisciplinary quality care to patients with RA in centers of excellence (CoEs) under the coordination of a rheumatologist, provide comprehensive management of patients with this pathology, ensuring approachability to medical appointments and treatment, in order to get better clinical outcomes and improve patient safety and satisfaction of the health services provided.

Objectives: To measure levels of satisfaction of RA patients treated at a specialized center and to evaluate patient service.

Methods: In a RA specialized center during a 24 month period we performed a satisfaction survey in order to evaluate the health services provided. We evaluated the timing on attention, appointment assignment, information provided, the treatment received by the healthcare team, facilities among others. Patients evaluated the services provided in a scale from 1 to 4, where 1 was very bad, 2 regular, 3 good and 4 excellent. Descriptive epidemiology was performed for each variable presented.

Results: We collected 1125 surveys during 2015 and 2016, 45% considered to have a timely care, the mean of waiting time for an appointment was 9 min \pm 8; regarding the appointment assignment 96% of the patients evaluated it as good or excellent (mean 3.5 ± 0.7), 80% considered that the information provided was clear and useful, 90% reported to receive a kind and friendly treatment and to considered the facilities as good or excellent. When we evaluated the satisfaction regarding the health care team 50% of patients evaluated the rheumatologist, nurse, nutritionist, physical therapist, psychologist and psychiatrist as good and 40% as excellent.

Conclusions: Although we found that our patients are highly satisfied, there is a large opportunity to improve our services. Also, this evidence can support further research projects in order to increase the patient's satisfaction.

References:

- [1] Th VP. Creating the ideal patient experience. *Journal of medicine and life.* 2016;9(4):380–385.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5380

HPR epidemiology and public health (including prevention)

AB1208-HPR PSORIASIS INDUCED BY TNF ANTAGONIST THERAPY. ANALYSIS OF 13 CASES

À. Martínez-Ferrer¹, A. Mateu Puchades², C. Vergara Dangond¹, M. Aguilari Zamora¹, L. Montolio¹, S. Santos², E. Valls Pascual¹, D. Ybáñez García¹, J.J. Alegre Sancho¹. ¹Rheumatology; ²Dermatology, Hospital Dr Peset, Valencia, Spain

Background: Tumor necrosis factor (TNF) antagonist drugs have been shown to be effective in different inflammatory arthropathies and autoimmune pathologies, including psoriasis. However, an unexpected side effect has been observed: the new occurrence or worsening of psoriatic lesions.

Objectives: The aim of this study is to describe the cases of induction or worsening of psoriasis in patients treated with TNF antagonist therapy in our center.

Methods: Retrospective observational study, review of cases of new or worsening psoriasis in patients with TNF antagonist at the University Hospital Dr. Peset from October 2008 to November 2016. A total of 13 cases were obtained.

Results: Thirteen patients, 8 females and 5 males with mean age 46 years (\pm 16). 38% of patients received treatment for Crohn's disease, 31% for rheumatoid arthritis (RA), 31% for psoriatic arthropathy (APs), 8% for ankylosing spondylitis (AE) and another 8% for psoriasis. Two patients were diagnosed of more than one pathology: Crohn's disease associated with APs and Crohn's disease associated with RA. Sixty one percent had no known personal history of psoriasis, in one of them the family history of psoriasis was recorded. Infliximab was used in 38.5% of cases, followed by adalimumab and golimumab in 23% each and etanercept in 15.4%. The mean latency time since drug introduction was 9.3 months (2–26). There were 12 cases of psoriasis and 1 case of pityriasis lichenoides (histologically confirmed). Lesion morphology included pustular psoriasis in 91%, scalp psoriasis in 25%, guttate lesions in 25%, plaque psoriasis in 8%, and inverse psoriasis in 8%; 58% experienced lesions of more than one type. There were no cases of nail, mucosal or erythrodermic psoriasis. The psoriasisform lesions resolved without interruption of TNF antagonist therapy in 53.85%. Of the 6 patients who required discontinuation, 3 patients were switched to another anti-TNF drug (adalimumab,