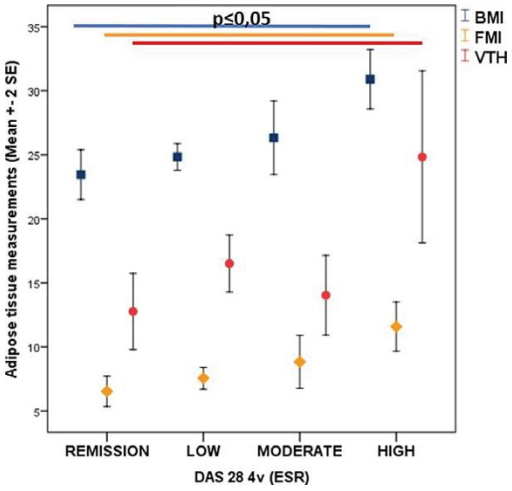
correlates with disease activity (assessed by the Disease Activity Score using 28 joint counts – DAS28) and affects the response to the therapy (DAS 28 variation from first evaluation).

Methods: 87 consecutive RA patients (pts) (72 women and 15 men; aged 52.4±13.2 years; disease duration of 10.7±8.6 years), treated with DMARDs and/or biologics (bDMARDs), were recruited during their regular visit. The inclusion criteria were the 1987 American College of Rheumatology (ACR) or ACR/EULAR 2010 classification criteria. The pts underwent to anthropometric measures (BMI); abdominal US to assess STH and VTH and derived computing of peritoneal circumference (PC); and BIA to the indices of body composition (fat-free mass index (FFMI) and fat mass index (FMI).

Results: We observed increasing values of BMI, FMI, VTH (fig. 1) and CP with the worsening of disease activity phases, evaluated by DAS 28. In particular, pts with DAS28≥5.1 had highest BMI (30,9±2; p=0,036), FMI (11,5±1,6; p=0,05), CP (92,7±12,5 cm; p=0,035) and VTH (24,8±5,8 mm; p=0,046) than pts in less severe disease activity. By linear regression analysis the predictor of higher DAS28 is the BMI (p=0,028). As regard the drug response, the predictors of DAS 28 improvement are higher FFMI (p=0,044) and lower BMI (p=0,015), independently by bDMARDs or DMARDs treatment. A trend to higher FMI and US AT measures was observed in female with high disease activity, in particular in menopause pts.



Conclusions: An altered fat distribution is observed in active RA phases; in particular, the FMI increasing is attributable just to visceral AT (VTH and CP). An inflammatory hyperactivity of visceral adiposity could be supposed in RA. The body composition, in addition to BMI, seems to predict the disease activity and drug response in RA patients. The evaluation of VTH by US could be useful to not overestimate the disease activity; instead the BIA could be a useful tool to support the clinicians in a more aggressive treatment management.

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AB0251 IN RHEUMATOID ARTHRITIS EROSIONS ARE MORE FREQUENT IN THE FEET THAN IN THE HANDS

M.L. Andersson, B. Svensson, K. Forslind. *Department of Clinical Sciences, Section of Rheumatology, Lund University, Lund and Helsingborg, Sweden*

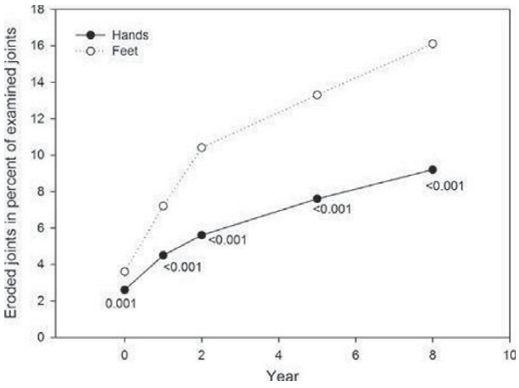
Background: Joint destruction in patients with rheumatoid arthritis (RA) is mostly evaluated by scoring radiographs of both hands and feet using the Sharp van der Heijde or Larsen scoring methods. In contrast, DAS28, the most commonly used composite measure of inflammation measure, does not include the feet.

Objectives: To study the distribution of erosions in hand and wrist (hands) and feet in early RA and elucidate if the feet should be included also in composite measures of inflammation

Methods: This study comprises 1 052 patients from the BARFOT study of patients with early RA, recruited 1992–2006. Radiographs of hands and feet were performed at baseline, 1, 2, 5 and 8 years and evaluated by the Sharp van der Heijde scoring (SHS) method (32 joints in the hands and 12 in the feet). Disease activity at baseline was measured by the DAS28.

Results: In the feet there were significantly more eroded joints in percent of examined joints at all time points (p<0.001), and higher erosion scores in percent of maximum erosion score at 5 and 8 years (0.037 and 0.021 respectively), compared with the hands.

There were no differences in mean joint space narrowing (JSN) between hands and feet at any time point. Patients with erosions only in the feet had significantly lower DAS28, mean 4.59, compared with the patients in the other groups, mean 5.03 in the no erosions group p=0.031, mean 5.17 in the group with erosions only in the hands, p=0.013, and mean 5.15 in the group with erosions in both hands and feet, p=0.031.



Conclusions: Joint destruction over time was more pronounced in the feet than in the hands. Baseline erosions limited to the feet were associated with low disease activity, suggesting that inflammation localized to the feet may not be reflected by DAS28. These observations may have relevance to the evaluating of disease activity and progression in the individual patient. Possibly inclusion of the feet to DAS28 might improve the validity of this disease activity measure.

Disclosure of Interest: None declared

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AB0252 THE IMPACT OF THE RHEUMATOID FOOT ON FUNCTION IN PATIENTS WITH RHEUMATOID ARTHRITIS EVALUATED BY FFI AND LFIS

M. Erraoui, B. Amine, L. Tahiri, I. El Binoune, J. Bahha, S. Fellous, Y. Boujenane, F. Allali, R. Bahiri. *Rheumatology, Mohammed V University, Faculty of Medicine and Pharmacy of Rabat, El Ayachi Hospital, SALE, Morocco*

Background: The impairment of function in patients with rheumatoid arthritis (RA) is determined by several factors related to the disease including joint damage. The foot, a location frequently affected during course of the disease, has a major impact on the lower limb and could cause functional disability.

Objectives: The purpose of this study is to evaluate the impact of the rheumatoid foot on function of patients with RA.

Methods: Cross-sectional study was conducted in 33 patients with RA. Patients with static lower limb disorder or foot injury from other origin were excluded. Demographic and clinical characteristics were collected: age, sex, BMI, disease duration, tender joint count, swollen joint count, foot pain evaluated on an VAS, foot squeeze test and various podiatric abnormalities observed clinically (forefoot, midfoot and rearfoot). Biological characteristics also collected: sedimentation rate in the first hour, C reactive protein, rheumatoid factor and anti-CCP. Disease activity was evaluated by DAS28, CDAI, SDAI and DAS44. Functional repercussions were estimated by the French Functional Index (FFI), comprising 23 items, divided into 3 sections: pain, function and limitation of activity. Functional disability was studied by the Leeds Foot Impact Scale (LFIS), which includes 51 items (21 items specific to foot function alteration (LFIS-I) and 30 related to foot disability (LFIS-D)). Statistical analysis was performed using SPSS21 software.

Results: Thirty-three patients followed for RA were included. The mean age of our patients was 49.39±10.52 with a female predominance (87.9%). Mean disease duration was 9.96±7.49 years. In all patients; 21 (95.5%) were seropositive. The mean DAS28 was 5.53±1.38 and the mean HAQ was 1.37±0.83. 93.9% of our patients had bilateral foot pain; 69.7% in the forefoot, 18.2% in the midfoot and 42.4% in the hindfoot. The medial retromalleolar tumefaction was found in 21.2% of the patients and the lateral retromalleolar tumefaction in 45.5% of them. The squeeze test was positive in 23 (69.7%) patients. Prevalences of Podiatric abnormalities were noted in the following ordre: hallux valgus (48.5%), quintus varus (12.1%), hallux rigidus (6.1%), claw toe (15.2%), triangular forefoot (9.1%), rearfoot valgus (27.3%) and rearfoot varus (27.3%).

Mean FFI was 52.35±25.63 (FFI-pain: 58.69±24.41, FFI-function: 53.66±30.48 and FFI- limitation of activity: 39.33±30.58). Mean LFIS-I was 11.48±5.36 and mean LFIS-D was 19.96.

A high FFI was associated with foot pain (p=0.034); in midfoot (p=0.029) and rearfoot (p=0.005) and with high disease activity: DAS28 (P=0.005), CDAI, SDAI and DAS44 (p=0.0001).

LFIS-I and LFIS-D were statistically related to pain in foot (p=0.019) (midfoot (0.042), hindfoot (0.003)), and to a positive squeeze test. The disease activity was positively correlated with high LFIS-I and LFIS-D (p=0.0001). The presence of medial retro-malleolar swelling, posterior gutter filling and calcaneal varus is responsible for a high FFI, LFIS-I and LFIS-D with respectively: p=0.0001, p=0.003, p=0.003.

Conclusions: The rheumatoid foot alters function. It causes disability which is related to foot pain, rearfoot podiatric abnormalities and disease activity.
Disclosure of Interest: None declared
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AB0253 TIPS ON SELECTION OF BIOLOGICS FOR PATIENTS WITH RHEUMATOID ARTHRITIS BASED ON TREATMENT PATTERNS

M. Kamiya[1], S. Soen[1], H. Kikuchi[2], N. Okada[3]. *[1]Department of Orthopaedic Surgery and Rheumatology, Kindai University Nara Hospital, Ikoma-City; [2]Department of Orthopaedic Surgery and Rheumatology, Kindai University Sakai Hospital, Sakai-City; [3]Department of Orthopaedic Surgery, Sumoto Itsuki Hospital, Sumoto-City, Japan*

Background: The emergence of biologics has led to innovation in the treatment of rheumatoid arthritis (RA). In the clinical setting, biologics are administered with careful consideration of complications and medical history in accordance with the treat-to-target recommendations. However, the progression of joint damage, the costs incurred before finding an effective biologic are serious concerns. It is therefore desirable to use biologics with long-term efficacy and less financial burden from the early stage.
Objectives: Participants were RA patients treated with one of three biologics having different mechanisms of action who achieved therapy targets with long-term treatment efficacy and consequently achieved either reduction or withdrawal of therapy. Patients' background characteristics and long-term treatment patterns were evaluated.
Methods: Between November 2004 and October 2016, 196, 57, and 85 RA patients were treated with etanercept (ETN), tocilizumab (TCZ), and abatacept (ABT), respectively, in first- or second-line therapy. These patients were divided into the continuation group, who underwent therapy with the same agent for $\geq$3 years without disease flare (DAS28-ESR $>$3.2) persisting 3 months, and the discontinuation group, who experienced primary failure resulting in discontinuation of the therapy within 3 months. Student's t test or Mann-Whitney's U test were used to compare patients' background characteristics between the two groups for each biologic. Further, log-rank test and Steel-Dwass test, respectively, were used to compare therapy continuation rates and reasons for discontinuation among the three biologics. Finally, relative dose intensity (RDI) was calculated to evaluate the treatment patterns of the individual biologics.
Results: The Kaplan-Meier method showed that the 3-year continuation rates of therapy with ETN, TCZ, and ABT were 54.2%, 23.8%, and 35.8%, respectively: the continuation rate of ETN was significantly higher than that of the other two agents. The numbers of patients treated with ETN, TCZ, and ABT were respectively 46, 9, and 14 in the continuation group and 16, 12, and 11 in the discontinuation group. The proportion of patients treated with ETN plus concomitant MTX was significantly higher in the continuation group than in the discontinuation group (P=0.0057). No significant differences were found in patients' background characteristics (disease duration, rheumatoid or anti-cyclic citrullinated peptide positivity, number of biologics previously used, and DAS28-ESR). Mean RDI values (median value, 95% confidence interval) over a 3-year period were as follows: 0.95 (0.92, 0.83–1.06) for 25 mg/week ETN therapy; 0.78 (0.90, 0.66–0.89) for 50 mg/week ETN therapy; 0.84 (0.84, 0.76–0.89) for TCZ therapy; and 0.87 (0.94, 0.79–0.95) for ABT therapy. The cumulative costs for 3 years of the respective treatments were 19,700, 32,200, 27,300, and 39,000 euros (1 euro =115 Japanese yen). After targets were reached, the dose of ETN was maintained at 25 mg/week or reduced from 50 mg/week, while the TCZ and ABT therapies were continued over the long term with a longer dosing interval.
Conclusions: Treatment with ETN plus concomitant MTX showed high continuation rates, and long-term achievement of therapy targets was maintained at a lower dosage (and thus, lower costs). It is beneficial to choose this method over non-TNF inhibitors.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.1146

AB0254 COMPARISON OF DYNAMIC PEDOBAROGRAPHIC FINDINGS BETWEEN RHEUMATOID ARTHRITIS PATIENTS AND HEALTHY INDIVIDUALS

S. Ghadimy, M. Aarabi, N. Abdolahi, N. Nematollahi, M. Aghaei. *Rheumatology Reasearch Center, Gorgan, Iran, Islamic Republic Of*

Background: Foot involvement happens early in RA patients and situation becomes ugly and painful rather very fast. There is a blank gap between starting of foot involvement and the time where patient needs surgical intervention for correcting the damages done by RA. No guideline exists for determining when and what we can do in these patients to detect and prevent the changes or at least reduce their damages.(1)
Objectives: 1. Evaluating foot pressure changes by pedobaroghy:
- comparing maximum force/peak pressure distributed in different regions of foot between RA patients and healthy individuals.
- comparing maximum force/peak pressure distributed in different regions of foot between men and women.
- determining effects of aging on maximum force/peak pressureby comparing them between two age groups.
- determining effects of duration of RA on force/peak pressure in RA patients.

2. Evaluating radiologic findings in symptomatic RA patients and comparing them with pedobarographic findings.
3. Evaluating and comparing quality of life in RA patients and healthy individuals with SF36 questionnaire.
Methods: 90 RA patients and 45 healthy individuals were chosen and entered this research. Patients divided into two groups: 45 patients without any previous foot symptoms, 45 with foot symptoms. All these groups underwent dynamic pedobarography with Novel emed pedobargraphy.
We took foot and ankle X-rays for symptomatic group.
Based on Larsen score, symptomatic patients were divided into individuals with and without radiologic changes.
Results: There was a significant difference in total maximum force between patients and healthy individuals; healthy individuals had lesser amount of maximum force in different parts of their feet compared to RA patients.
Fore foot region endured the most amount of maximum force and pressure in all three groups with no significant difference between groups.
RA patients both symptomatic and asymptomatic had more force and pressure upon their midfoot regions compared to the healthy group p-value:.000.
Since we excluded patients with severe deformities and those who couldn't walk alone from the study, and our cases were relatively in early stages of disease, we didn't find any significant difference in pressure or force between symptomatic patients with and without radiographic findings. This can be explained by the fact that foot pressure alteration detectable in pedobarography is already begun in all patients with foot symptoms but radiologically evident pathologies had not happened yet.
Conclusions: RA has considerable effect on patients' feet along with other physical and mental issues. While conventional radiologic methods has a limited eficacy in predicting and diagnosing the pathologic changes in foot region, pedobarography can easily shows these changes in foot pressure values and can be used to detect RA patients that need simple interventions like using proper insoles to prevent surgical interventions
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AB0255 EVALUATION OF KINESIOPHOBIA IN PATIENTS WITH RHEUMATOID ARTHRITIS AND ANKYLOSING SPONDYLITIS

M. Aykut[1], B. Cakit[2], E. Mert[2], S. Aslan[2], E. Sahingoz[2], H. Genc[2], F.F. Ayhan[2], A. Karagoz[2]. *[1]Physical Medicine and Rehabilitation, Ankara Training and Research Hospital; [2]Physical Medicine and Rehabilitation, Ankara Training and Research Hospital, Ankara, Turkey*

Background: Fear avoidance behavior which is caused by painful injury resulting precision and extreme fear is defined as kinesiophobia. Rheumatoid arthritis (RA) is a chronic, inflammatory and systemic disease with symmetrical arthritis and visceral involvement. Ankylosing spondylitis (AS) is a chronic, inflammatory disease with involvement of the spine or peripheral joints.
Objectives: In our study, we aimed to evaluate the relationships between kinesophobia and disease activity, quality of life (QoL), level of physical activity and emotional status in RA and AS patients.
Methods: We included 42 patients with RA (8 males-M, 34 females-F) (group 1), 49 patients with AS (34 M, 15 F) (group 2) and 29 healthy controls (9 M, 20 F) (group 3) in our study. The QoL was assessed using the health assessment questionnaire (HAQ), kinesiophobia was assesed with Tampa scale of kinesiophobia (TSK), pain was assesed with visual analog scale (VAS), fatigue was assesed with VAS and emotional status was assesed with Beck depression inventory (BDI). Disease activity was assesed with Bath ankylosing spondylitis disease acitivity index (BASDAI) and functional status was assesed with Bath ankylosing spondylitis functional index (BASFI) in patients with AS. Disease activity was assesed with DAS28 in patients with RA.
Results: The mean age was 46.2 in group 1, 43.2 in group 2 and 40.17 in group 3. There was no difference among groups with respect to mean age ($p>0.05$). Kinesiophobia was present in 37 patients in group 1, 22 patients in group 2 and 7 patients in group 3. Statistically significant differences were found among groups

Table 1. Baseline features of the patients of AS and RA and healthy controls

	Group 1	Group 2	Group 3
Age	46,2±11,47	43,2±10,73	40,17±7,77
Gender (F/ M)	34/8	15/34	20/9
VAS*	47,02±24,42	32,44±26,75	1,72±4,68
TKS**	44,73±7,26	36±12,03	29,58±9,37
Fatigue (VAS)†	55,47±24,31	36,93±27,70	37,93±20,59
HAQ‡	0,73±0,83	0,43±0,41	0,06±0,19
BDI§	14,17±9,49	12,23±9,63	5,25±6,13

*p=0.008 between group 1 and 2; p<0.001 between group 2 and 3; p<0.001 between group 1 and 3. **p<0.001between group 1 and 2; p=0.023 between group 2 and 3; p<0.001 between group 1 and 3. †p<0,05 between group 1 and 2; 2 and 3; 1 and 3. ‡p=0.039 between group 1 and 2; p=0.021 betwen group 2 and 3; p<0.001 between group 1 and 3. §p>0.05 between group 1 and 2; p=0.004 betwen group 2 and 3; p<0.001 between group 1 and 3.