Objectives: The aim of our study was to determine the effect of anemia on the structural and functional state of the heart in patients with rheumatoid arthritis.

Methods: The 154 patients with rheumatoid arthritis were included in the study: 37 patients with anemia (1st group) and 117 – without systemic manifestations of rheumatoid arthritis (2nd group). RA activity was estimated by index DAS-28. All patients underwent echocardiography.

Results: Both groups were comparable in age, sex, ratio of seropositive and seronegative patients. A comparative analysis of both groups revealed that in 1st group DAS-28 was higher than in 2nd group ($p<0.05$). According to the results of echocardiography, the left ventricular myocardial mass index was higher in 1st group than in the 2nd group ($p<0.05$). The same applies to the end-diastolic size of the left ventricle: in patients with anemia, it was more than in patients without it ($p<0.05$). Our results suggest that patients with anemia often have a violation of diastolic myocardial function, which is accompanied by an increase in myocardial mass. The correlation analysis in both groups revealed a direct relationship between the age and the left ventricular mass index ($r=0.62$, $p<0.0005$), between the age and the mitral E/a ($r=-0.55$, $p<0.00001$). In addition, in 1st group we revealed the inverse relationship between the DAS-28 and the tricuspid E/a ($r=-0.43$, $p<0.05$).

Conclusion: Thus, regardless of the presence of anemia, the patients with rheumatoid arthritis observed dependence of structural and functional changes in the heart of age: a violation of diastolic function of the left ventricle, an increase of the left ventricular myocardial mass index. However, in patients with anemia, an increase in the activity of the disease is accompanied by diastolic dysfunction of the right ventricle that requires correction in the tactics of patient management.

REFERENCES

- [1] rheumatoid arthritis, anemia, echocardiography

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AB0318

BAROPODOMETRIC COMPARISON OF PLANTAR PRESSURE IN KNEE OSTEOARTHRITIS PATIENTS AND RHEUMATOID ARTHRITIS PATIENTS

Safaa Fellous¹, Jihad Moulay Berkchi¹, Hanan Rkain¹, Tahiri Latifa¹, Régis Guieu², Yves Jammes², Fadoua Allali¹. ¹Faculty of Medicine and Pharmacy of Rabat, Mohammed V University, Rabat, Rabat, Morocco; ²UMR MD2 Faculty of Medicine, Aix-Marseille University, Marseille, marseille, France

Objectives: To compare the plantar pressure between patients with Knee Osteoarthritis and patients with rheumatoid arthritis

Methods: This is a cross-sectional study, included 41 patients with rheumatoid arthritis (87.8% female, mean age 49 ± 11.9 [27-83] years, median duration of evolution was 9 (4.20) months, and 40 knee osteoarthritis patients (100% female, mean age 57.6 ± 5.2 [50-67] years, median evolution time was 36 (24, 69) months).

The two groups were matched by BMI (27.5 vs. 29.6, $p>0.05$).

In the rheumatoid arthritis group: The mean DAS28 was 3.9 ± 1.3 [2-6] and the knee joint was affected in 22% of cases.

In the knee osteoarthritis group: The knee osteoarthritis was bilateral in 80% of the cases and the radiological severity (Stages 3 or 4 of Kellgren and Lawrence classification) was found in 27.5%.

The baropodometric study was performed using a PRESSCAM[®] platform (SIDAS[®], 38,000 VOIRON, MEDICAPTEURS[®]). The static analysis was done in free position, for 30 seconds at 50 Hz with measure of plantar pressure parameters.

Results:

Baropodometric characteristics	Rheumatoid arthritis	Knee osteoarthritis	p
Surface of whole foot (cm ²)	105.2	123.7	<0.001
Maximum pressure of whole foot(g/cm ²)	667.8	655.8	0.72
Average pressure of whole foot (g/cm ²)	307.3	307	0.98
Surface of forefoot (cm ²)	39.1	44.5	0.02
Surface of hindfoot (cm ²)	64.1	60.7	0.2
Thrust of forefoot(%)	15.5	23.4	<0.001
Thrust of hindfoot(%)	33.9	29.1	<0.001
Thrust of the whole foot (%)	50.1	52.5	0.06

P significatif si $p \leq 0,05$; Test utilisé : t-student

Conclusion: This comparative static baropodometric study of patients with RA and patients with knee osteoarthritis shows significant differences in bearing surface, which appears to be lower in the RA group, especially in the forefoot. The thrust on the forefoot is also less important in the RA group.

these results could be explain by the rheumatoid forefoot, which decreased support and pressure on the forefoot.

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AB0319

ABATACEPT IN RHEUMATOID ARTHRITIS WITH INTERSTITIAL LUNG DISEASE. A MULTICENTRE STUDY OF 181 PATIENTS

Carlos Fernández-Díaz¹, J. Loricera², Santos Castañeda³, A. Juan-Mas⁴, Carmen Carrasco-Cubero⁵, Ivette Casafont-Solé⁶, Raquel Almodovar⁷, Noelia Alvarez-Rivas⁸, Clara Aguilera Cros⁹, Ignacio Villa-Blanco¹⁰, Sergi Ordoñez¹¹, Susana Romero-Yuste¹², C. Ojeda-García¹³, Manuel Moreno¹⁴, I. Hernández-Rodríguez¹⁵, M. López-Corbeto¹⁶, Maria Lopez Lasanta¹⁶, Francisco Ortiz-Sanjuán¹⁷, B. Alvarez-Rodríguez¹⁸, A. Ruibal-Escribano¹⁸, Rosa Expósito¹⁹, M. Retuerto-Guerrero²⁰, Trinidad Pérez Sandoval²¹, Alejandra López Robles²¹, Patricia Carreira²⁰, Natalia Mena-Vázquez²², Ana Urruticoechea-Arana²³, C. Delgado-Beltrán²⁴, José Luis Andréu Sánchez²⁵, Alejandro Olive²⁶, S. Rodríguez-Muguruza²⁶, José Antonio Bernal-Vidal²⁷, E.C. Cervantes Pérez²⁸, Olga Maiz-Alonso²⁹, R. Castellanos-Moreira³⁰, S. Rodríguez-García³⁰, I. Cabezas-Rodríguez³¹, Mireia Moreno³², Ivan Castellví³³, Luis Marcelino Arbolea Rodríguez³⁴, C. González-Montagut Gómez³⁵, Blanca Garcia-Magallon³⁶, E. Salgado-Pérez³⁷, M. Rodríguez-Gómez³⁷, C. Fito-Manteca³⁸, J.M. Blanco³⁹, Deseada Palma Sanchez⁴⁰, Paloma Vela-Casasempere⁴¹, Gemma Bonilla⁴², R. López-Sánchez⁴³, J. Fernández-Melon⁴⁴, Cristina Hidalgo⁴⁵, Miguel A. González-Gay², Ricardo Blanco². ¹H. Vinalopo, Elche, Spain; ²H. Marqués de Valdecilla, Santander, Spain; ³H. Princesa, Madrid, Spain; ⁴H. Son Llàtzer, Palma de Mallorca, Spain; ⁵CHU Infanta Cristina, Badajoz, Spain; ⁶Hospital Universitari Germans Trias i Pujol, Barcelona, Spain; ⁷H. Fundación Alcorcon, Madrid, Spain; ⁸HULA, Lugo, Spain; ⁹H. Virgen del Rocío, Sevilla, Spain; ¹⁰H. Sierrallana, Torrelavega, Spain; ¹¹H. Arnau de Vilanova, Lleida, Spain; ¹²H. de Pontevedra, Pontevedra, Spain; ¹³H. U. Virgen Macarena, Sevilla, Spain; ¹⁴H. Virgen de la Arrixaca, Murcia, Spain; ¹⁵Hospital Meixoeiro, Vigo, Spain; ¹⁶H. U. Vall d'Hebron, Barcelona, Spain; ¹⁷H. La Fe, Valencia, Spain; ¹⁸H. Txagorritxu, Vitoria, Spain; ¹⁹H. Laredo, Laredo, Spain; ²⁰H. 12 de octubre, Madrid, Spain; ²¹H. León, León, Spain; ²²H. Malaga, Malaga, Spain; ²³H. Can Misses, Ibiza, Spain; ²⁴H. Lozano Blesa, Zaragoza, Spain; ²⁵H. Puerta Del hierro, Madrid, Spain; ²⁶H. German Trias I Pujol, Badalona, Spain; ²⁷H. Elda, Elda, Spain; ²⁸H. Santiago de Compostela, Santiago, Spain; ²⁹HU Donostia, Donostia, Spain; ³⁰H. Clinic, Barcelona, Spain; ³¹H. Río Ortega, Valladolid, Spain; ³²Parc Tauli, Barcelona, Spain; ³³H. De la Santa Creu i Sant Pau, Barcelona, Spain; ³⁴H. Central Asturias, Oviedo, Spain; ³⁵H. Clinico, Valladolid, Spain; ³⁶H. San Jorge, Huesca, Spain; ³⁷CH Ourense, Ourense, Spain; ³⁸H. Navarra, Pamplona, Spain; ³⁹H. Basurto, Bilbao, Spain; ⁴⁰H. Rafael Mendez, Lorca, Spain; ⁴¹HU Alicante, Alicante, Spain; ⁴²H. La paz, Madrid, Spain; ⁴³HU. Negrin, Gran Canaria, Spain; ⁴⁴H. Son Espases, Palma de Mallorca, Spain; ⁴⁵HU. Salamanca, Salamanca, Spain

Background: Interstitial Lung Disease (ILD) is a severe extraarticular manifestation of rheumatoid arthritis (RA).

Objectives: Our aim was to assess the efficacy of abatacept (ABA) in RA patients with ILD.

Methods: Retrospective multicenter study of RA patients with ILD treated with ABA. ILD was diagnosed by HRCT. We have analyzed the following variables: **a)** 1-point change the Modified Medical Research Council (MMRC); **b)** FVC improvement $\geq 10\%$; and improvement $\geq 10\%$ in DLCO; **c)** radiological improvement in HRCT scan, **d)** changes in DAS28 score. Values were compared with baseline **e)** prednisone doses

Results: We studied 181 patients (94women/87 men) with ILD associated to RA. The follow-up was $12.1[6.2-24.1]$ months. The mean age was 64.54 ± 9.7 years. The median to progression of ILD was 12 [3-43.75] months. 81 patients were treated in monotherapy, 100 patients in combination therapy. The most frequent pattern was UIP 45.3%.

The most of patients who did not have dyspnea remained asymptomatic. See results in Figure1. DAS28 also improved. We appreciate a decrease in the dose of prednisone compared to the initial dose.

Conclusion: ABA seems to be effective. However, should be verified in prospective and randomized studies.

Table 1.

	Evolution at last observation.
MMRC, available data, n	
- Stable	(76,5%)
- Improvement	(20,6%)
- worse	(2,9%)
FVC, available data, n	
- Stable	(70,3%)
- Improvement	(12,9%)
- Worse	(16,8%)
DLCO, available data, n	
- Stable	(71,6%)
- Improvement	(18,2%)
-worse	(10,2%)
HRCT, available data, n	
- Stable	(21%)
- Improvement	(20%)
- worse	(21%)

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AB0320

FATIGUE PATTERNS IN RHEUMATOID ARTHRITIS PATIENTSWHO RECEIVE BIOLOGICAL AND TARGETED SYNTHETIC DISEASE-MODIFYING ANTIRHEUMATIC DRUGS

Dalifer Freites Nuñez^{1,2}, Marta Redondo³, Judit Font¹, Alfredo Madrid García², Cristina Vadillo¹, Lydia Abasolo^{1,2}, Leticia León^{2,3}. ¹Hospital Clínico San Carlos., Rheumatology, Madrid, Spain; ²Instituto de Investigación Sanitaria Hospital Clínico San Carlos (IdISSC), Madrid, Spain; ³Facultad de Educación y Salud. Universidad Camilo Jose Cela, Madrid, Spain

Background: Fatigue is one of the most frequent symptoms in patients with rheumatoid arthritis (RA), affecting more than 80% of them. The experience of fatigue is multidimensional.

Objectives: To identify the factors associated with fatigue on its different subscales (Physical, Living, Cognitive and Emotional).

Methods: Cross-sectional study. 60 patients were included, they were being followed up in the rheumatology outpatient clinic of Hospital Clínico San Carlos, Madrid, Spain. Data were collected between July 2018 and January 2019. All patients met the ACR/EULAR 2010 criteria and they were in treatment with Biological or Targeted Synthetic DMARD. **Main variable:** Fatigue was assessed by the Bristol Rheumatoid Arthritis Fatigue Multidimensional Questionnaire (BRAFM-DQ). **Covariables:** Demographic, clinical and treatment. **Statistical analysis.** A descriptive analysis was carried out for the different variables. To identify factors independently associated to BRAFM-DQ and its subscales, multivariable linear regression was applied. Results were expressed as coef with their corresponding 95% CI. A value of $p < 0.05$ was accepted as statistically significant.

Results: A total of 60 patients, comprising of 53 females (88%) and 7 males (12%) with a mean age of 56.4 ± 11.8 years and mean disease duration of 14.1 ± 7.7 years were evaluated. RF was positive in 60% of patients. 65% were in active on work and 23% retired. Regarding comorbidities, 43% had dyslipidemia, 42% hypertension, 17% hypothyroidism and 15% depression. The DAS28-ESR and SDAI scores of the patients were 2.6 ± 0.8 , 8.5 ± 5.9 respectively. The HAQ was 0.86 ± 7.7 . The rest of the clinical, treatment characteristics, and the scores of the fatigue instruments are shown in **Table 1**. The factors affecting the BRAFM-DQ and its subscales was evaluated in multivariate analyze **Table 2**. Our results shows a correlation between disability and the different dimensions ($p < 0.001$). Patients who reported good sleep quality had less physical fatigue, while those under Non Anti-TNF treatment perceived more physical and living fatigue. In addition, an association was observed between depression and cognitive fatigue, disease activity (DAS28-ESR) and living fatigue and between VAS-pain score and emotional fatigue. A positive RF was associated with less physical and living.

Conclusion: It is important to evaluate fatigue in a multidimensional perspective, each of the different subscales could be modulated by different factors. The results of our study indicated that disability predicts in all subscales of fatigue, however, other factors can configure different patterns of fatigue in RA patients, and identify them is key to the approach of this complex symptom.

Table 1. Characteristics of the sample

Glucocorticoids mg/day, mean $\pm$ SD	4.8 $\pm$ 1.6
Treatment, n (%)	47 (78.3)
Conventional DMARDs	40 (66.6)
Anti TNF	16 (26.6)
Non-Anti TNF	4 (6.6)
Synthetic target DMARDs	
VAS pain mean $\pm$ SD	39.3 $\pm$ 24.2
Sleep quality self-report, n (%)	23 (39.6)
Good	35 (60.3)
Poor	
BRAFM-DQ (0-70), mean $\pm$ SD	21.9 $\pm$ 15.0
Physical (0-22)	10.6 $\pm$ 5.4
Living (0-21)	5.08 $\pm$ 5.0
Cognitive (0-15)	3.3 $\pm$ 3.3
Emotional (0-12)	2.9 $\pm$ 2.7