

Disclosure of Interests: Debbie Boeters: None declared, Leonie Burgers: None declared, Rene Toes Grant/research support from: Sanofi, Annette van der Helm - van Mil Grant/research support from: The research leading to these results has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Starting grant, agreement No 714312) and from the Dutch Arthritis Foundation. The funding source had no role in the design and conduct of the study.
DOI: 10.1136/annrheumdis-2019-eular.2234

OP0346

MRI OF THE WRIST IN EARLY RHEUMATOID ARTHRITIS AFTER 1-YEAR TREAT-TO-TARGET STRATEGY

Fan Xiao^{1*}, James F Griffith¹, Lai-Shan Tam². ¹Prince of Wales Hospital, The Chinese University of Hong Kong (SAR), Imaging and Interventional Radiology, Hong Kong, Hong Kong (SAR); ²Prince of Wales Hospital, The Chinese University of Hong Kong (SAR), Department of Medicine and Therapeutics, Hong Kong, Hong Kong (SAR)

Background: There are two types of remission in rheumatoid arthritis. The first, and most commonly applied, is clinical remission. Imaging remission is another aspect to consider given that (a) the correlation between clinical and imaging at presentation is only modest, (b) imaging can show subclinical inflammation not evident clinically and (c) imaging evidence of inflammation can predict structural damage (1). In this study, we compared clinical and imaging remission in early rheumatoid arthritis (ERA) patients after one year of standard treatment.

Objectives: To semi-quantitatively and quantitatively measure the degree of inflammation (synovitis, tenosynovitis, bone marrow oedema) and structural change (erosions, joint space narrowing) on MRI in early RA patients following treat-to-target strategy treatment for one year and to compare this with changes in clinical parameters.

Methods: Prospective cross-sectional study of 70 ERA patients underwent treat-to-target strategy treatment for one year. DAS28-ESR remission (DAS28-ESR score ≤ 3.2), 2011 ACR/EULAR definition of remission, SDAI remission (SDAI ≤ 3.3) and Boolean remission was measured before and after treatment. High resolution MRI of the most symptomatic wrist was performed before and after treatment. MRI parameters including RAMRIS subscores, synovial volume (synovitis and tenosynovitis), synovial perfusion (max enhancement, enhancement slope) were measured.

Results: 55 (%) out of 70 ERA patients completed baseline and one-year clinical and MRI assessments. Remission rates for DAS28-ESR, SDAI and Boolean were 60% (33), 44% (24) and 33% (18) respectively. Eight (24%) out of 33 patients with DAS28-ESR remission, showed progression in bone erosion. Four (16.7%) of 24 patients with SDAI remission showed progression in bone erosion while 1 (5%) of 18 patients with Boolean remission showed progression in bone erosion. Patients who achieved remission after treatment had a greater reduction in all MRI-evident inflammation as well as bone erosion. At month 12, MRI-evident joint synovitis, tenosynovitis and bone marrow oedema was still frequently seen in ERA patients with clinical remission though patients who achieved Boolean remission had the lowest levels of joint synovitis (RAMRIS Synovitis = 2.6 ± 0.8 (2.9 ± 1.3 for SDAI remission and 3 ± 1.2 for DAS28-ESR remission); synovitis volume = 1298 ± 1217 mm³ (1480 ± 1367 mm³ for SDAI remission and 1520 ± 1584 mm³ for DAS28-ESR remission); synovitis perfusion of max enhancement = $38 \pm 22\%$ ($41 \pm 24\%$ for SDAI remission and $41 \pm 25\%$ for DAS28-ESR remission)), bone marrow oedema (RAMRIS BME score = 0.9 ± 1.1 (1.3 ± 2.6 for SDAI remission and 1.4 ± 2.3 for DAS28-ESR remission)) as well as bone erosion (RAMRIS bone erosion score = 4 ± 5.8 (4.6 ± 5.5 for SDAI remission and 4.3 ± 4.9 for DAS28-ESR remission)) for all patients at one year.

Conclusion: MRI detected inflammation is common even in patients with clinical remission. Patients with Boolean remission had overall less residual inflammation than DAS28-ESR or SDAI remission patients as well as lowest number of patients who had bone erosion progression in remission group at month 12. Treat to target protocols should ideally target Boolean remission.

REFERENCE:

- [1] Anandarajah A, Thiele R, Giampoli E et al. Patients with rheumatoid arthritis in clinical remission manifest persistent joint inflammation on histology and imaging studies. *J Rheumatol.* 2014 Nov;41(11):2153-60.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7617

SATURDAY, 15 JUNE 2019

Restless lives: Managing fatigue, sleep and pain

OP0347-PARE

THE INFLUENCE OF PAIN ON SLEEP PROBLEMS, MENTAL HEALTH AND USE OF STRONG PAINKILLERS AMONG PATIENTS WITH ARTHRITIS

Lene Mandrup Thomsen. *The Danish Rheumatism Association, 2820, Denmark*

Background: Chronic pain is a part of daily life for many people with RMD and leads to reduced quality of life, high risk of losing work ability, impaired functions and a poor social life. The chronic pain also means that many patients need painkillers. In Denmark there is a very high consumption of strong painkillers (opioids) compared to the other countries in Scandinavia. Therefore, the authorities have a great focus on reducing this and are urging the doctors to reduce the prescription of strong painkillers to patients with chronic pain, including patients with RMDs.

In the Danish Rheumatism Association, we have many inquiries to our professional helpline from patients regarding pain. Especially about the use of painkillers, sleeping problems caused by pain, and the negative influence that pain has on one's mood. The patients experience side effects and discomfort associated with the painkillers. Some must phase out their consumption of strong painkillers, because of the authorities' focus on this - and have problems with this.

In order to get a more detailed knowledge about the influence of pain among patients with RMD, the Danish Rheumatism Association made this study.

Objectives: To investigate the influence of pain on sleeping problems, mental health and the use of strong painkillers among members of a user-panel.

Methods: The study was carried out in November 2018 as an online questionnaire survey sent to 1328 members of a user-panel in The Danish Rheumatism Association. 69% answered the questionnaire. The user-panel consists of people with at least one RMD. It is not representative of patients with RMD in Denmark.

Results: The most important results are:

Sleep: 67% rarely or never feel fully rested when they wake up in the morning, and 36% takes painkillers to improve their sleep. 69% have experienced that the quality of their sleep has affected their pain negatively.

Mental health: During the past four weeks, 58% have felt that everything is unmanageable for them due to pain, 11% indicated having had thoughts of taking their own life due to pain, and 45% have not wanted to be together with other people because of their pain.

Use of strong painkillers: 83% have pain on a daily basis or several times a week. Among these, 46% have received strong painkillers over the last year, and 78% have not been offered alternatives to strong painkillers.

More results from the survey will be presented on EULAR.

Conclusion: The study indicates that pain and poor quality of sleep, has surprisingly large influence on patient's daily life. More than one third takes painkillers to improve their sleep. Pain seems to have a severe negative influence on their sleep and reversed - poor sleep worsens their pain. Surprisingly many are still using strong painkillers, despite the authorities focus on reducing prescription of strong painkillers, and the patients' state, that they are not been given an alternative to strong painkillers. Finally, the study shows that pain has a surprisingly negative influence on mental health and the patients' hope for the future. In general, it has been a surprise for the Danish Rheumatism Association, that pain has such a huge impact on the participants' daily life, especially on their mental health. Therefore, the organization has been using the result of this study in our political work for better treatment and support to patients with chronic pain in our healthcare system, and in our political campaigning about the importance of a focus on pain among patients with RMDs. It is to be explained on EULAR, how we more concrete have applied the results of the study in our political work.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.4723

OP0348-PARE

FACE ARTHRITIS: WHAT SITUATIONS AFFECT EMOTIONALLY THE PATIENT WITH RHEUMATOID ARTHRITIS AND HOW TO RESOLVE THEM EFFECTIVELY

Santos Castañeda¹, José Bernardo Negrón², D María. Navarro Rubio³, L José. Baquero Ubeda⁴, Loreto Carmona⁵, Spanish Forum of Patients and ConArtritis. ¹Hospital de La Princesa, Rheumatology, Madrid, Spain; ²Institute of Musculoskeletal Health - InMusc, Madrid, Madrid, Spain; ³Hospital Sant Joan de Déu, Barcelona, Barcelona, Spain; ⁴Foro Español de Pacientes, Madrid, Madrid, Spain; ⁵Instituto de Salud Musculo-esquelética, Madrid, Spain

Background: WHO defines health as a state of physical, psychological and social well-being. However, patients with rheumatoid arthritis (RA) declare that