rheumatology department of the Kassab Institute. The socio-demographic data, biological and immunological parameters were collected.

Framingham's score quantified the cardiovascular risk at 10-years. Carotid Ultrasonography (US) using a high resolution B mode carotid measured intima-media thickness (IMT) as a subclinical marker of atherosclerosis. Carotid US was performed in the supine position, according to American Society of Echocardiography guidelines. IMT was measured in the left (LCC) and right (RCC) common carotid arteries, the left (LIC) and right (RIC) internal carotid arteries, and the left (LEC) and right (RRC) internal carotid arteries. An increased IMT was defined as ≥ 0.9 mm.

We analyzed data by the SPSS statistical package. A p-value < 0.05 was considered significant.

Results: Of the 47 patients surveyed, 78.7% were female. The mean age was 52.5 ± 11.06 [32-76]. The duration disease was 86.25 ± 63 months [5-288] and was erosive in 81.6% of cases. The rheumatoid factor (RF) was positive in 57.8% of patients, and citrullinated antipeptide antibodies (ACPA) were present in 62.2%. Eight patients had a previous CV history (hypertension, diabetes or dyslipidemia) and 16.4% were active smokers. Among women, 43.6% were postmenopausal. ITM was significantly higher in men at LIC (0.037) and LEC (0.025). Older age was associated with increased ITM in LIC ($p=0.046$; $r=0.295$), LEC ($p=0.05$; $r=0.412$), RCC ($p=0.034$; $r=0.317$), and REC ($p=0.009$; $r=0.382$). The ITM for LCC, LIC, LEC, RCC, RIC, and REC was higher in postmenopausal women, with no significant difference ($p=0.782$, $p=0.208$, $p=0.877$, $r=0.734$, $p=0.808$, $p=0.437$, respectively).

Among the modifiable factors, active smoking was associated with a higher ITM at the REC level ($p=0.047$). However, weight was not associated with an increased ITM (LCC: $p=0.092$; LIC: $p=0.985$; LEC: $p=0.952$; RCC: $p=0.744$; RIC: $p=0.210$; REC: $p=0.510$). In our study, there was no significant association between DAS28 disease activity or inflammatory marks and ITM (LCC: $p=0.784$; LIC: $p=0.316$; LEC: $p=0.420$; RCC: $p=0.784$; RIC: $p=0.484$; REC: $p=0.754$).

Conclusion: In our study, the non-modifiable factors associated with increased ITM were advanced age and male gender. The modifiable factor impacting ITM was primarily active smoking. Surprisingly, disease activity and biological inflammation did not influence ITM.

REFERENCES:

- [1] S. Gunter and al. Arterial wave reflection and subclinical atherosclerosis in rheumatoid arthritis. *Clinical and experimental rheumatology* 2018; 36: clinical e.xperimetal.
- [2] Aslan and al. Assessment of local carotid stiffness in seronegative and seropositive rheumatoid Arthritis. *Scandinavian cardiovascular journal*, 2017.
- [3] Martin i. Wah-suarez and al, carotid ultrasound findings in rheumatoid arthritis and control subjects: a case-control study. *Int j rheum dis*. 2018;1-7.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.4183

AB0192 EVALUATION OF TEMPOROMANDIBULAR JOINT INVOLVEMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS

M. Braham¹, A. Ben Salem¹, H. Hachfi¹, R. Sarraj¹, S. Abedallatif¹, R. Tekaya¹, C. Baccouche², Y. Mohamed¹. ¹Tahar Sfar Hospital, Rheumatology, Mahdia, Tunisia; ²Tahar Sfar Hospital, Dentistry, Mahdia, Tunisia

Background: Rheumatoid Arthritis (RA) is the most common chronic inflammatory disease usually involves peripheral joints with a symmetric distribution. The temporomandibular joint (TMJ) is seldom joint to be affected first in the disease course.

Objectives: The Aim of our study is to describe and to assess the prevalence of temporomandibular joint (TMJ) disorders in patients with Rheumatoid arthritis (RA).

Methods: A cross sectional study including RA patients, which consulted or were hospitalized in Rheumatology department in Taher Sfar Hospital of Mahdia Tunisia, during a period of 10 months. The diagnosis of the RA was secured by the ACR/EULAR 2010, Rheumatoid Arthritis Classification Criteria. The clinical TMJ examination was performed by a trained dentist in the same hospital. We assessed TMJ pain with VAS (visual analog scale) which varies from 0 to 10. The following key parameters were evaluated: The pain on the TMJs by bilateral palpation; The TMJ sounds (clicking or crepitus) during opening closing of the mandible; dysfunction and movement alterations. Clinical and sociodemographic parameters were also determined.

Results: Our study included 51 patients with an average age of 51.11 years ± 12.4 [21-74years]. 50 patients (92.6% of cases) were women and 8 patients (14.8%) were diabetic. Only one patient was a smoker. The mean duration of RA was 10.7 years 7.7 ± 10 [months-35years]. Rheumatoid factor (RF) was positive in 25 patients (46.3% of cases). Anti-citrullinated peptide antibody (ACPA) was positive in 32 patients (59.3%). 41 patients (75.4%) had radiological impairments and 28 (51.9%) had specific deformations of RA. The average disease activity score (DAS28-VS) and (DAS28-CRP) were respectively 4.1 ± 1.5 [1.4-7.3] and

3.4 ± 1.5 [1.24-6.71]. TMJ pain was present in 29 patients (56.9 %) which 67.7% appeared before ten years. 5 patients (16.7%) had VAS more than 7 that mean a severe pain. TMJ involvement was bilateral in 64.3% and unilateral in 35.7 %. Functional difficulties were detected in 22 patients (44.9 %). TMJ examination had also revealed a limitation of mouth opening in 11 patients (21.2 %), a movement alteration in 13 patients (27.79 %), a clicking in joint mobility in 13 patients (81.3 %) and joint crepitus in 1 patient (6.3%). Disease duration was associated with TMJ pain ($p=0.05$) and mobility alterations ($p=0.04$). Functional difficulties of the TMJ were correlated with DAS28 ($p=0.02$). In our study we found also that duration of corticosteroid therapy had an impact on TMJ pain ($p=0.01$), functional difficulties ($p=0.01$) and movements alterations ($p=0.004$).

Conclusion: TMJ is very rare to be affected in the early phase of the disease, thus patient may develop signs and symptoms in the course of time. Our study showed the frequency of TMJ disorders and the most important factors were the activity of RA and the duration of the disease course.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.4194

AB0193 PRESENCE OF SUBLINICAL SYNOVITIS IN A ESTABLISHED RHEUMATOID ARTHRITIS COHORT

E. Rojas¹, V. Valinotti¹, M. Vazquez¹, L. Roman¹, M. Maidana², J. Ramirez³, S. Cabrera-Villalba¹. ¹Clinicas Hospital, Universidad Nacional de Asunción, Rheumatology, Asunción, Paraguay; ²Maria Auxiliadora Center of Sonographic Studies, Ultrasonography, Asunción, Paraguay; ³Hospital Clínic Barcelona, Rheumatology, Barcelona, Spain

Background: Some studies prove that a significant percentage of patients with rheumatoid arthritis (RA) in sustained clinical remission has radiological progression or joint damage, and the presence of residual activity objectified by imaging studies such as ultrasonography could be related to a relapse or flare of RA. (1,2)

Objectives: To determine the presence of subclinical synovitis measured by ultrasonography in patients with RA on sustained clinical remission from the Rheumatology service at Hospital de Clínicas, San Lorenzo, Paraguay.

Materials and Methods: Prospective, cross sectional, descriptive study, in RA patients meeting ACR/EULAR 2010 criteria, older than 18 years, on sustained clinical remission (≥ 6 months), measured by ESR-DAS28 (< 2.6), doing follow-ups on our service. A healthy control group was included. All groups signed informed consent. Synovial hypertrophy (SH) and intraarticular vascularization grades on Power Doppler (PD) mode were determined according to EULAR recommendations and OMERACT 7 group definitions. Clinical data were obtained from the service's registries.

SPSS 23rd version was used for data analysis. Quantitative variables were presented as means and qualitative as frequencies. Chi square test was performed for comparisons between dichotomous variables and t Student for continuous. For comparisons between variables the Spearman's rank correlation coefficient was performed, and $p \leq 0.05$ for statistical significance. Factors predicting subclinical synovitis were analyzed with Odds Ratio (OR) CI 95%.

Results: From 147 patients, 31 (21%) met remission criteria; 87.1% women, mean age 51.9 ± 14.8 years. Mean disease duration was 9.06 ± 10.81 years. 64.5% were RF and ACPA positive and 25.9% had erosions.

Ultrasonograms were made in 20 joints of both hands: radiocarpals (RC), metacarpophalangeals (MCP) and proximal interphalangeals (PIP). 12 patients (38.7%) presented subclinical synovitis ($SH \geq 2+PD$), more frequently on RC (29% right, 22.6% left), and MCP (9.7% on 2RMCP, 9.7% 4LMCP). These patients had greater CDAL (3.9 ± 1.37 vs 2.89 ± 1.15 , $p=0.03$), HAQ (0.14 ± 0.29 vs 0.00 ± 0.00 , $p=0.04$), CRP (9.90 ± 7.46 vs 4.74 ± 2.30 , $p=0.00$) RF levels (502.67 ± 275.66 vs 200.92 ± 158.43 , $p=0.00$), greater prednisone (16.5% vs 3.2%, $p=0.04$), and methotrexate use (20.16 ± 5.54 vs 17.50 ± 3.98 , $p=0.01$). None of the healthy controls presented subclinical synovitis.

In binary logistic regression CRP levels, RF titers and methotrexate doses were associated to subclinical synovitis. This association is not found in multivariate logistic regression. Negative association was found between subclinical synovitis and two csDMARDs use.

Conclusion: This is the first study of its type in Paraguayan patients, which clearly evidenced that an important part of RA patients in clinical remission still presented subclinical synovitis ($HS \geq 2+PD$). It was associated with CRP, RF and methotrexate dose.

REFERENCES:

- [1] Plaza M, Nowakowska-Plaza A, Pracoń G, Sudół-Szopińska I. Role of ultrasonography in the diagnosis of rheumatic diseases in light of ACR/EULAR guidelines. *J Ultrason*. marzo de 2016;16(64):55-64.
- [2] Foltz V, Gandjbakhch F, Etchepare F, Rosenberg C, Tanguy ML, Rozenberg S, et al. Power Doppler ultrasound, but not low-field magnetic resonance imaging, predicts relapse and radiographic disease progression in rheumatoid arthritis patients with low levels of disease activity. *Arthritis & Rheumatism*. 2012;64(1):67-76.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.4208