

The mean ESR and CRP were 46.3 ± 29.3 mm [5-120] and 15.8 mg/l [0.6-100] respectively. The mean DAS28 ESR was 4.68 ± 1.35 [1.50-7.16] and the mean DAS28 CRP was 3.9 ± 1.1 [1.02-6.05].

A significant positive correlation was noted between both DAS28 ESR and DAS28 CRP and, number of nocturnal awakenings ($r=0.385$, $p=0.013$ and $r=0.448$, $p=0.002$), morning stiffness duration ($r=0.495$, $p=0.001$ and $r=0.617$, $p<0.001$), GPA ($r=0.485$, $p<0.001$ and $r=0.530$, $p<0.001$), and pain VAS ($r=0.594$, $p<0.001$ and $r=0.598$, $p<0.001$). No correlation was found between the two scores and fatigue VAS.

No significant agreement was noted between PATSAT and DAS28 ESR ($\kappa=0.077$, $p=0.478$).

Conclusion: PROs showed moderate to strong correlation with disease activity scores. The timely and effective use of PROs could encourage physicians to focus more on the impact of RA on patients and how patients are feeling. This in turn would facilitate shared decision making between patients and physicians.

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AB0189

LIPOPROTEIN ABNORMALITIES IN RHEUMATOID ARTHRITIS PATIENTS

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Background: The lipid paradox is termed the decreased cholesterol level in rheumatoid arthritis (RA). Nevertheless, the apolipoprotein levels are usually higher than a healthy person and are predictors of cardiovascular events.

Objectives: We aimed to describe lipid abnormalities in RA patients and to look for predictor factors of these changes.

Methods: The prospective study was carried out on patients with RA who met the 2010 American College of Rheumatology (ACR)/European League Against Rheumatism (EULAR) classification criteria. These patients were followed in the rheumatology department of the Kassab Institute.

We collected the socio-demographic data, biological and immunological parameters.

The lipid assessment included: a measurement of total cholesterol (TC), HDL, LDL, and triglycerides (TG). Lipoproteins APOA1 and APOB were measured. All data were collected after patient consent.

Results: Of the 47 patients recruited, 78.7% were female. The mean age was 52.5 ± 11.06 [32-76]. The average RA progressed from 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.

Mean TC was 4.42 ± 1.3 [1.2-7.58], mean HDL was 1.38 ± 0.73 [0.18-4.10], mean LDL was 2.55 ± 1.16 [0.24-5.54]. The mean TG value was 1.28 ± 0.6 [0.24-5.54]. TC elevation was found in 9.1% of cases, HDL in 21.3% of cases, LDL in 5.5% of cases, and TG in 16.4% of cases. Mean APOB/APOA1 ratio was 0.67 ± 0.18 [0.46-1.11]. LDL elevation was associated to a high DAS28 ($p=0.06$, $r=0.512$). APOA1 was associated to a low DAS28 ($p=0.04$, $r=-0.642$).

The mean value of APO A1 was 1.36 ± 0.21 [0.84-1.81], that of APOB was 0.90 ± 0.22 [0.58-1.40]. APOA1 values were lower in patients with high-level LDL ($p=0.767$). The APOB value was associated with lipid disturbance without significant correlation ($p=0.291$).

Conclusion: Lipid test abnormalities can be found in RA patients outside of any known CV risk factors. APOA1 seems to have a protective effect. Screening and treatment of these abnormalities can prevent CV risk.

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AB0190

LIVER INVOLVEMENT IN RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) can be associated to extra-articular manifestations and comorbidities, including hepatic disturbances. It can be related to an underlying viral, metabolic or immune disease, or to a medical treatment toxicity [1].

Objectives: We aim to study liver involvement in a group of RA patients.

Methods: We performed a cross sectional study in 249 RA patients responding to the ACR/EULAR 2010 criteria for RA diagnosis. Hepatic enzymes, B and C hepatitis viruses screening tests, abdominal ultrasonography, biliary tract MRIs, fibrotests and fibroscans if available were collected and analysed.

Results: Two hundred and forty-nine patients were included with 83.8% of women. The mean age was 59 ± 11.67 years. The mean age at diagnosis was 47 ± 14.9 years with a mean disease evolution of 11 ± 8.83 years.

The mean disease activity (DAS28) was 4.66 with levels ranging from 0.12 to 7.78 .

Liver abnormalities were found in 68 patients (27.3%).

Viral disease represented 32.3% of liver abnormalities and was found in 8.8% of the total number of patients. Positive anti-HBc antibodies with negative HBs antigen were found in 8.4% of the patients, no viral reactivation with conventional or biological disease-modifying anti-rheumatic drugs was noted.

Besides, 4 of the 249 patients had positive HCV antibodies tests; one of them had a reactivation of a hepatitis C infection after treatment with leflunomide, one had a chronic C hepatitis with chronic liver disease, one had an old B and C hepatitis infection and the last one had an associated liver nodule for which an exploration was triggered. One patient had post hepatitis C cirrhosis associated with a hepatocellular carcinoma treated with surgery and an association of ledipasvir and sofosbuvir with a negative serology.

Medical treatment toxicity was responsible for 25% of liver abnormalities. Paracetamol caused both hepatic cholestasis and cytolysis in 5 patients, and isolated cholestasis in 2 patients. NSAIDs caused both hepatic cholestasis and cytolysis in 2 patients, and isolated cholestasis in one patient. Methotrexate was responsible for isolated cholestasis in 2 patients, isolated hepatic cytolysis in one patient and both cholestasis and cytolysis in one patient. An interaction between methotrexate and fluconazole caused one case of hepatic cholestasis and cytolysis. Treatment of a latent tuberculosis with isoniazid and rifampicin was responsible for cholestasis in one patient.

Immune hepatic disease was present in 3 patients: 2 patients had a primary biliary cholangitis that manifested with a cholestasis and one patient had an auto-immune hepatitis that manifested with cytolysis and cholestasis.

The prevalence of hepatic steatosis was of 4.8%, assessed with ultrasonography or microscopic examination of a liver biopsy. Hepatic enzymes test was normal in 2%, showed isolated cholestasis in 2% and both cholestasis and hepatic cytolysis in 0.8% of the patients.

One patient had a secondary hemochromatosis to multiple transfusions for sickle cell anaemia, causing cholestasis and cytolysis.

No aetiology was found for hepatic cholestasis and/or cytolysis in 7.2% of patients.

Conclusion: Liver involvement in RA is common and has different aspects. A careful monitoring of liver enzymes tests is crucial to detect hepatic disease and prevent its evolution to a chronic liver disease and cirrhosis. On the other hand, screening for viral hepatitis B and C is necessary to prevent an aggravation of a chronic infection and a reactivation of a latent one [2].

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AB0191

ON WHICH FACTOR TO ACT TO REDUCE CARDIOVASCULAR RISK IN PATIENTS WITH RHEUMATOID ARTHRITIS?

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Background: Patients with rheumatoid arthritis (RA) are at higher cardiovascular risk (CVR) than the general population due to chronic inflammation. Several factors, both modifiable and non-modifiable, can increase this risk. Intima-media thickness (IMT) was considered as a marker for atherosclerosis.

Objectives: This study aimed to identify predictor factors of increasing IMT.

Methods: The prospective study was carried out on patients with RA who met the 2010 American College of Rheumatology (ACR)/European League Against Rheumatism (EULAR) classification criteria. These patients were followed in the

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 (REC) 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. IMT was significantly higher in men at LIC ($p=0.037$) and LEC ($p=0.05$; $r=0.412$), RCC ($p=0.034$; $r=0.317$), and REC ($p=0.009$; $r=0.382$). The IMT 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.

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AB0192

EVALUATION OF TEMPOROMANDIBULAR JOINT INVOLVEMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS

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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 $7.7 \pm$ [10months-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.

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AB0193

PRESENCE OF SUBLINICAL SYNOVITIS IN A ESTABLISHED RHEUMATOID ARTHRITIS COHORT

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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 2R MCP, 9.7% 4LMCP). These patients had greater CD4I (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.

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