Conclusion: To our knowledge this is the first experimental controlled study demonstrating rituximab may play a role in inducing granulomatous hepatitis with a sarcoidosis-like reaction.

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AB0111 THE ROLE OF KLOTRO IN RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is a chronic systemic and disabling disease affecting 0.5–1% of the general population. It is characterized by the presence of autoantibodies including rheumatoid factor (RF) and anti-citrullinated peptide antibodies (ACPA). Klotho is a membrane-bound protein predominantly expressed in the kidney, parathyroid gland and choroid plexus that displays enzymatic and co-receptor functions, being involved in the prevention of aging, in the calcium-phosphate balance and in the reparative and fibrotic processes. Klotho seems to play an essential role in the maintenance of vessel tone control, in tissue regeneration and reparation and in the electrolytic balance.

Objectives: We aimed to compare serum Klotho levels between RA patients and healthy controls and the possible association between soluble Klotho with different characteristic of the disease.

Methods: This cross-sectional study was performed in Vega-Baja Hospital, Orihuela (Spain) from November 2016 to May 2018. We prospectively enrolled 63 consecutive women patients affected by RA and followed at the Vega-Baja Hospital (Orihuela, Spain) and 65 matched healthy women controls. All patients included in this study had normal serum creatinine (Cr) levels and met the 2010 American College of Rheumatology/European League Against Rheumatism (ACR/EULAR) criteria for RA. ACPAs were detected using a second-generation ELISA (ACPAs) kit (ORGENTEC Diagnostika GmbH, Mainz, Germany) while IgM RF was determined as part of routine analysis by turbidimetric assay (Siemens Healthcare Diagnostic Inc. NY, USA) according to the manufacturers' instructions. Serum Klotho was analyzed using ELISA.

Results: The mean serum total ACPAs and RF were 571.22±1040.89 U/ml and 173.73±751.8 U/ml, respectively. Serum Klotho concentrations were significantly higher in the RA patients than those in the control group: [4.68 (1.4–7.8) vs. 3.5 (0.6–6.1), ng/mL; $P < 0.0001$]. They were positively associated with the presence of ACPA and RF ($p < 0.05$). Klotho serum levels were higher in RA patients treated with biologic agents than in those undergoing conventional therapy ($p = 0.008$).

Conclusion: The increased serum Klotho levels in RA patients, especially in those undergoing biologic therapy, may indicate a potential implication in the pathogenesis of the disease.

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AB0112 EVALUATION OF A NEW MULTIPLEX TECHNOLOGY ASSAY FOR ANTI-CITRULLINATED PEPTIDE ANTIBODIES DETERMINATION

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Background: Anti-citrullinated peptides antibodies (ACPA) are highly specific RA markers. In 2010, experts included them in the ACR/EULAR criteria for disease diagnosis, usually, measured by ELISA. However, a new assay has been developed, recently: Multiplex technology, which allows searching IgG ACPA directed against four citrullinated peptides: Human (HCP1 and 2) and Viral (VCP1 and 2).

Objectives: First, assess ACPA diagnostic performances using Multiplex technology and then compare them to those obtained with the reference technique (ELISA).

Methods: We studied sera of 273 RA patients versus 165 controls (64 healthy controls and 101 patients with other pathologies). We realized ACPA dosage by Multiplex technology and compared them with ELISA assay results. In the end, we looked for a correlation between ACPA production and shared epitope expression in RA patients.

Results: The overall agreement calculated between the two methods was about 91.3%. As to the comparison of diagnostic values of Multiplex technology vs. ELISA, it revealed a sensitivity of 80.2% vs. 82.4% and a specificity of 95.8% vs. 95.5%. Then, for a better evaluation, we plotted ROC curves for ACPA detected by Multiplex technology and ELISA ones. Therefore, we obtained the following areas under the curve (AUC) (p value < 0.0001): Anti-: HCP1 (0.775), HCP2 (0.798), VCP1 (0.715) and VCP2 (0.837) and ACPA ELISA (0.867). Finally, our results reveal higher serum levels of ACPA detected by Multiplex technology, in case of SE expression [SE (+) vs. SE (-)] (p value < 0.0001).

Conclusion: Diagnostic performance of ACPA detection methods is comparable with relatively good agreement. Our study demonstrated an association between elevated serum levels of anti-HCP and anti-VCP and SE expression, in RA patients.

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AB0113 ARTHRITIS IS ASSOCIATED WITH CEREBROVASCULAR ENDOTHELIAL DYSFUNCTION: MECHANISTIC INSIGHTS IN THE RAT ADJUVANT-INDUCED ARTHRITIS MODEL

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Background: Stroke is the second cause of premature mortality and sudden death in rheumatoid arthritis (RA) after myocardial infarction¹. The mechanisms involved in the high risk of stroke are currently unknown, but data from the general population argue for a contribution of cerebrovascular dysfunction.