Figure 1. AUC at IL-23 between SA patients 0.705 (p<0.0001)

Nevertheless, no correlation was found between serum IL-23 levels and the following parameters: ESR, CRP, BASDAI, ASDAS-CRP, BASFI and BASRI.

Results: The study included 57 men and 15 women. The mean age was 44.84 ± 13.42 years. The mean age at the onset of the disease was 35.97 ± 12.88 years. The disease duration was 8.54 ± 7.7 years.

Seventy-nine per cent of our patients had axial radiographic spondyloarthritis (n=57). Peripheral involvement was found in 45.8% (n=33). Eighteen patients had both axial and peripheral involvement concomitantly. Psoriasis was found in 36.1% of the cases (n=26).

The mean BASDAI and ASDAS-CRP were 3.21 ± 1.64 and 3.05 ± 1.51, respectively.

The mean was BASFI 3.88 ± 2.69. The mean was BASRI 5.26 ± 4.14.

The mean ESR and CRP were 36.74 ± 29.38 mm/hr and 20.45 ± 25.19 mg/dL, respectively.

IL-23 level was significantly higher in patients compared to healthy controls (23.1 ± 2.72 pg/mL and 5.02 ± 0.59 pg/mL, respectively, p<0.0001).

As shown in Figure 1, the AUC value to distinguish between spondyloarthritis and healthy control was 0.705 (p<0.0001). IL-23 cut-off was 7.96 pg/mL (Sensibility= 69.4%, specificity=98.6%).

Conclusion: As reported to previous studies, our study showed that IL-23 is significantly higher in SA patients (2).

Interestingly, IL-23 was able to distinguish between SA patients and healthy controls with a cut-off of 7.96 pg/mL. This finding suggests that IL-23 may be practical for the diagnosis of SA.

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AB0841 | **ALTERED XANTHINE OXIDASE AND XANTHINE DEHYDROGENASE ACTIVITIES IN RED BLOOD CELLS AS A CONTRIBUTION TO AUTOIMMUNE ANEMIA APPEARANCE IN RHEUMATOID ARTHRITIS**

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Background: Rheumatoid arthritis (RA) is severe autoimmune joint disease, accompanied by a wide variety of extra-articular manifestations. Anemia is one of the most common organ involvements in RA, being diagnosed in 36-65% patients. Iron metabolism alterations, shortened RBC lifespan, and impaired erythropoiesis in bone marrow are believed to play a leading role in RA-related anemia development. These processes in RA can be mediated by increased effect of proinflammatory cytokines, including IFNγ and TNFα, and similar mechanisms could contribute to high xanthine oxidoreductase (XOR) expression. This enzyme makes multiple pathophysiological effects, some of which can be related to the development of anemia in RA. Reactive oxygen species generated by XOR are capable, in particular, of damaging cell membranes, exerting influence on iron mobilization from ferritin in liver, and inducing changes in intestinal iron absorption.

Objectives: Evaluation of changes in XOR interconvertible forms (xanthine oxidase and xanthine dehydrogenase) activities in RBC of RA patients.

Methods: The research was carried out in agreement with the WMA Declaration of Helsinki principles. 75 RA patients with verified RA were enrolled in the study. The diagnosis was verified using the ACR/EULAR criteria (2010). The reference group consisted of 35 healthy individuals. Xanthine oxidase (XO, EC 1.17.3.2) and xanthine dehydrogenase (XDG, EC 1.17.1.4) activities were measured in lysed red blood cells by spectrophotometric method as previously described [1]. The enzymatic activities were expressed as nmol/min/ml and normalized to 1×10^9 cells/ml. Statistical comparison tests were selected in according to common guidelines. Central tendencies were expressed as means±SEM. Differences were considered significant when p<0.05.

Results: Mean age of RA patients was 43.9±0.97 years, and mean RA duration was 8.5±0.3 years. Extra-articular manifestations were diagnosed in 32 (42.7%) RA patients and 17 (53.1%) of them had anemia. We revealed substantial changes in XO and XDG activities in lysed RBC of RA patients with anemia. Increased XO activity and decreased XDG activity were observed in comparison with healthy controls (p<0.001 for both enzymes). In parallel with the increase in DAS28 index, significant growth of XOD/XDG coefficient was observed, which was caused by both XOD activity elevation and XDG activity reduction in lysed RBC (p<0.001 for both enzymes). Enzymatic activities depended also on the extra-articular RA manifestations. Mean XO activity was higher and mean XDG activity were lower in patients with extra-articular manifestations (p<0.05 for both enzymes), but the extent of changes was substantially less comparing to anemia.

Conclusion: Autoimmune inflammation in RA is accompanied by changes in enzymatic activities of XOR interconvertible forms and their ratio. Transformation of XDG into KO ultimately leads to significant increase in the generation of reactive oxygen species that have a damaging effect on lipids, proteins and other cellular components, and specifically in RBC. This fact may be one of the reasons for their premature damage and development of anemia in RA.

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AB0842 | **CESAREAN SECTION IN MEXICAN WOMEN WITH AUTOIMMUNE RHEUMATIC DISEASES**

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Background: Rheumatic diseases occur among women of childbearing age, adverse events during pregnancy in rheumatic diseases have been frequently reported. Mexico has one of the largest prevalence of cesarean section in women which negatively impacts the product.

Objectives: The objective of this study is to describe the frequency of cesarean section in women with autoimmune rheumatic diseases compared to a control group.

Methods: We conducted a cross-sectional and retrospective study in patients from the pregnancy and rheumatic diseases clinic, and the Obstetrics department form the University Hospital "Dr. José E. González" in Northeast Mexico. Women with autoimmune rheumatic diseases that gave birth between August 2017 to December 2020 were included. All the data, including the way of birth was retrieved from the clinical files.

Results: One hundred and twelve patients were included (56 in the rheumatic disease group and 56 women without rheumatic diseases), two of them suffered miscarriage (one from the rheumatic disease group and 1 from the control group) giving a total of 110 products. The mean age was 29.6 years for the rheumatic patients and 24.6 for the control group. The most frequent rheumatic disease was RA in 22 patients (39.2%), followed by SLE in 13 patients (23.21%).

From the 56 pregnancies on the rheumatic disease group more than half ended by cesarean section (n=33, 58.92%) and there were 22 simple vaginal delivery. Table 1. On the control group there were 24 cesarean section procedures and