

5. EXPRESSION OF THE INFLAMMATORY SYNDROME MANIFESTATIONS IN PATIENTS WITH SERONEGATIVE RHEUMATOID ARTHRITIS



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Introduction. Rheumatoid arthritis (RA), a systemic autoimmune disease that is predominantly affecting synovial joints through a progressive destructive process, is classified into 2 subgroups - seronegative (SNRA) and seropositive (SPRA) - which is important for predicting disease progression and response to treatment.

Aim of study. To study the status of RA inflammatory activity according to seropositivity (rheumatoid factor and anti-CCP antibodies).

Methods and materials. 38 patients with RA were included in the study, who were diagnosed according to American College of Rheumatology ACR/EULAR 2010 criteria: group 1 (24 patients) - seropositive (RF+ and/or ACCP+) and group 2 (14 patients) – seronegative (RF- and ACCP-). Clinical data, the degree of expression of the inflammatory syndrome by DAS28 score and Ritchie Articular index were studied.

Results. Seronegative patients were older than seropositive patients (55.8 ± 12.1 years vs 50.7 ± 10.9 years, $p=0.04$), which is possibly determined by the onset of the disease at an older age, while the gender distribution did not show any statistical difference ($p=0.091$). The number of swollen joints showed a statistically significant higher value in the SPRA group compared to the SNRA group (median 17 vs 8, $p<0.001$), a finding confirmed by the DAS28-CRP score (3.9 ± 0.6 vs 3.4 ± 0.4 , $p=0.03$). However, it is required to mention comparable statistical values for the number of painful joints (median 19 vs 20, $p>0.091$) and physician-determined VAS (49.1 ± 2.33 vs 48.9 ± 3.12 , $p=0.006$), which emphasizes the marked inflammatory entity of rheumatoid arthritis regardless of serum profile. But, following on from the objective, we were interested in extending the study of nonspecific markers of inflammation between groups, so that we obtained some unexpected results. Therefore, comparing mean values of CRP and VSH we determined that they were significantly higher among patients in the SNRA group compared to SPRA (CRP(SNRA) 52.5 ± 6.9 vs CRP(SPRA) 41.25 ± 7.2 , $p<0.05$; ESR(SNRA) 56 ± 12.8 vs. ESR(SPRA) 43 ± 15.0 , $p<0.05$).

Conclusion. The seronegative variant of rheumatoid arthritis is characterized by a marked magnitude of the systemic inflammatory process expressed by elevated CRP and ESR, but with statistically significant lower values of DAS28, which is due to the lower contribution of the number of swollen joints value to the overall score, compared to seropositive rheumatoid arthritis.