Comparative Evaluation of Seropositivity and Patterns Distribution Rates of the Anti-Nuclear Antibodies in the Diagnosis of Four Different Autoimmune Collagen Tissue Diseases

Authors : Recep Kesli, Onur Turkyilmaz, Cengiz Demir

Abstract : Objective: Autoimmune collagen diseases occur with the immune reactions against the body's own cell or tissues which cause inflammation and damage the tissues and organs. In this study, it was aimed to compare seropositivity rates and patterns of the anti-nuclear antibodies (ANA) in the diagnosis of four different autoimmune collagen tissue diseases (Rheumatoid Arthritis-RA, Systemic Lupus Erythematous-SLE, Scleroderma-SSc and Sjogren Syndrome-SS) with each other. Methods: One hundred eighty-eight patients applied to different clinics in Afyon Kocatepe University ANS Practice and Research Hospital between 11.07.2014 and 14.07.2015 that thought the different collagen disease such as RA, SLE, SSc and SS have participated in the study retrospectively. All the data obtained from the patients participated in the study were evaluated according to the included criteria. The historical archives belonging to the patients have been screened, assessed in terms of ANA positivity. The obtained data was analysed by using the descriptive statistics; chi-squared, Fischer's exact test. The evaluations were performed by SPSS 20.0 version and $p < 0.05$ level was considered as significant. Results: Distribution rates of the totally one hundred eighty-eight patients according to the diagnosis were found as follows: 82 (43.6%) were RA, 38 (20.2%) were SLE, 22 (11.7%) were SSc, and 46 (24.5%) were SS. Distribution of ANA positivity rates according to the collagen tissue diseases were found as follows; for RA were 54 (65,9 %), for SLE were 36 (94,7 %), for SSc were 18 (81,8 %), and for SS were 43 (93,5 %). Rheumatoid arthritis should be evaluated and classified as a different class among all the other investigated three autoimmune illnesses. ANA positivity rates were found as differently higher (91.5 %) in the SLE, SSc, and SS, from the RA (65.9 %). Differences at ANA positivity rates for RA and the other three diseases were found as statistically significant ($p=0.015$). Conclusions: Systemic autoimmune illnesses show broad spectrum. ANA positivity was found as an important predictor marker in the diagnosis of the rheumatologic illnesses. ANA positivity should be evaluated as more valuable and sensitive a predictor diagnostic marker in the laboratory findings of the SLE, SSc, and SS according to RA.
Keywords : antinuclear antibody (ANA), rheumatoid arthritis, scleroderma, Sjogren syndrome, systemic lupus Erythemotosus
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