

PREVALENCE OF AUTOANTIBODIES COMMONLY FOUND IN CONNECTIVE TISSUE DISEASES (CTD) IN AN ELDERLY POPULATION IS NOT AFFECTED BY SERUM LEVELS OF 25(OH)D

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**Introduction:** The presence of vitamin D receptor (VDR) in cells of the immune system suggests that vitamin D (VD) could have immunoregulatory properties. Vitamin D deficiency (VDD) has been linked with many CTD including systemic lupus erythematosus and rheumatoid arthritis. **Objective:** The goal of this study was to evaluate the prevalence of autoantibodies commonly found in CTD in an elderly population with a high prevalence of VDD. **Material and Methods:** A cross-sectional study was carried out, and serum 25(OH)D levels were assayed by chemoluminescence (Liaison), anti-neutrophil cytoplasmic antibodies (ANCA) (Scimedx ANCA IFA), rheumatoid factors (RF) (N Latex RF), ANA by Indirect Immunofluorescence in HEp-2 cells. VDD was defined as serum 25(OH)D levels lower than 20 ng/mL, in despite that, VD level required to maintain optimal immune system homeostasis has not yet been established. **Results and Conclusions:** 100 patients were studied, VDD was found in 83%. Speckled nuclear immunofluorescence was the most frequent ANA pattern in both subjects with deficiency and normal VD levels. ANA HEp-2 was reagent in 33.7% of the subjects with VDD and 30.8% of the subjects without VDD. In subjects with VDD, speckled nuclear immunofluorescence was the most frequent 24% and these antibodies were positive in the majority of cases when the serum was diluted to 1/160 and 1/320. RF presented the same frequency in both groups 42.9%. ANCA was positive only in one subject in the VDD group. As the prevalence of VDD was very high in this group, it is possible that the VD level required to maintain an optimal immune system homeostasis is higher than 20 ng/mL. In conclusion, there was no difference in the prevalence of ANA HEp-2, ANCA and RF in elderly with VDD or not.