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SEROLOGICAL AND CLINICAL CHARACTERIZATION OF ANTI-DNA AND ANTI-PM/SCL DOUBLE POSITIVE SAMPLES

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Antibodies to double-stranded desoxyriboneic acid (dsDNA) and to the Polymyositis/Scleroderma complex are serological markers for systemic lupus erythematosus (SLE) and polymyositis/scleroderma (PM/Scl) overlap syndrome, respectively. In a previous study, samples were identified that bound both dsDNA and PM/Scl, each of which historically regarded as specific markers for SLE and PM/Scl respectively. Sera used in a previous study were studied and the autoantibody profile was determined using several methods including an addressable laser bead assay (INOVA, San Diego, US), nDNA by Crithidia luciliae indirect immunofluorescence test (CLIFT, ImmunoConcepts, Sacramento, US) and PM1-Alpha ELISA (Dr. Fooke Laboratorien GmbH, Neuss, Germany). Moreover 300 samples from connective tissue disease patients were screened for anti-dsDNA+ / PM/Scl+ specimens by CLIFT, dsDNA ELISA (Dr. Fooke Laboratorien GmbH) and PM1-Alpha ELISA. We confirmed anti-dsDNA and anti-PM/Scl reactivity in 2/7 samples from the previous study. One sample had also anti-chromatin and anti-SS-A reactivity and the second sample was polyspecific (anti-chromatin, anti-Rib-P, anti-Sm, anti-RNP, anti-Scl-70). Moreover, two additional sera in the study of 300 unselected samples could be identified with anti-dsDNA and anti-PM/Scl reactivity. All anti-dsDNA+ / anti-PM/Scl+ patients fulfilled sufficient criteria to be classified as SLE and had at least one feature of systemic sclerosis. The rare combination of anti-dsDNA+ / anti-PM/Scl+ occurs in patients suffering from connective tissue disease but less frequently than previously described when state of the art detection methods are used. Clinically, anti-dsDNA+ / anti-PM/Scl+ patients may define a subgroup of patients with SLE and additional features of systemic sclerosis (sclerodactyly and/or Raynaud's phenomenon).