Abstract


Assessment of antioxidative defense parameters in serum and age of patients showing antibodies anti-Borrelia burgdorferi presence--non-symptomatic carriers

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OBJECTIVE: To evaluate in serum antioxidative defence parameters--SOD EC.1.15.1.1 (superoxide dismutase), GSH-Px EC.1.15.1.1 (glutathione peroxidase), -SH (sulphhydryl groups) among patients previously diagnosed with borreliosis presently showing antibodies against Borrelia burgdorferi presence.

METHODS: The antioxidative defence parameters were evaluated in 117 sera of patients with previously diagnosed borreliosis aged x = 43,07. Control group consisted of 39 persons aged x = 40,97 with no detectable anti-Borrelia burgdorferi antibodies in serum. Serologic diagnosis was performed with use of ELISA kit--Borrelia rekombinant IgM, IgG (Biomedica, Austria). Serum activity of antioxidative defence parameters-- SOD EC.1.15.1.1 (superoxide dismutase), GSH-Px EC.1.15.1.1 (glutathione peroxidase), -SH (sulphhydryl groups) were detected in all patients from both groups. Obtained results were statistically analysed.

RESULTS: There was no significant difference in serum activity of SOD and GSH-Px in group of former borreliosis patients and control group. Also serum -SH concentration did not differ significantly between both examined groups of patients.

CONCLUSIONS: No correlation between SOD and GSH-Px serum activity as well as -SH concentration was detected.

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