

SERUM STATUS OF ENDOGENOUS ANTIOXIDANT MARKERS: BILIRUBIN, ALBUMINS, TOTAL PROTEINS AND CREATININE IN MYASTHENIA GRAVIS PATIENTS

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There is a lot of evidence pertaining to the etiopathogenetic importance of oxidative stress in a number of autoimmune diseases, including some immune-mediated neurological diseases such as multiple sclerosis. However, the role of oxidative stress and oxidative status in patients with myasthenia gravis is still an under-researched area.

The aim of our research was to compare serum total and direct bilirubin, albumin, total proteins and creatinine levels in myasthenia gravis (MG) patients with healthy controls, and patients with multiple sclerosis (MS).

The subjects were divided into three groups (92 MG patients, 68 healthy controls and 74 MS patients). All MG patients were newly diagnosed, classified with MGFA Clinical Classification, and divided into two groups regarding onset age (early < 50 years, late ≥50 years), sex (male, female), thymus pathology (present, absent).

Serum antioxidant status was significantly lower in MG and MS group compared to the healthy controls ($p < 0.05$). There was no significant difference in serum antioxidant status between patients with MG and those with MS. Regarding MGFA Classification we have not found any correlation with serum levels of measured parameters.

Our findings suggested that there was a potential role of oxidative process in MG pathology. Among the analyzed parameters, direct bilirubin showed significantly lower value in women, the elderly and in the group of MG patients with pathologically altered thymus gland.

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