

coenzyme Q10. The hypertensive patients and healthy subjects were divided into two groups; dipper or non-dipper. Decreased TAC levels were found in the normotensive non-dipper group compared with the hypertensive non-dipper group ($p < 0.01$). MDA levels were decreased in the normotensive dipper group compared with the hypertensive dipper group ($p < 0.05$). The MDA and CoQ10 levels in the normotensive non-dipper group were lower than in the hypertensive dipper group ($p < 0.01$, $p < 0.05$, respectively). *Conclusion:* This study revealed that there is a consistent statistically significant difference between essential hypertensives and controls with respect to the measured parameters. This study showed that oxidative stress is increased in patients with hypertension.

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MGMT PROMOTER METHYLATION IN BULGARIAN PATIENTS WITH GLIAL TUMORS

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Background: MGMT is a repair protein that removes alkyl groups from the O6 position of guanine in DNA, thus protecting the cell from alkylating agents. Promoter hypermethylation of the gene *MGMT* has been extensively studied in glioma patients because of its importance for prognostic and treatment purposes. Methylation of *MGMT* has been associated with prolonged survival and might be suitable for use as a predictor of response to treatment with alkylating drugs. *Methods:* To determine the prognostic value of *MGMT* in Bulgarian patients with glial tumors, we assessed its promoter methylation in glial tumor tissues from 50 patients by methyl-specific PCR. *Results:* *MGMT* was found to be methylated in 12 patients (24%). No statistically significant correlation was observed with mutations in *IDH1* and no prognostic significance was found for *MGMT* in the examined group. Although *MGMT* was not shown to be a prognostic factor in patients who underwent only surgery, in the group of patients treated with radio- and/ or chemotherapy *MGMT* methylation status was associated with the overall survival ($p = 0.031$). *Conclusion:* Promoter hypermethylation of the gene *MGMT* may be applied as a prognostic factor in Bulgarian patients with gliomas.

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MMP2 GENE POLYMORPHISMS AND MMP2 MRNA LEVELS IN PATIENTS WITH SUPERFICIAL VARICES OF LOWER EXTREMITIES

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Background: Although superficial varices of the lower extremities are common and with high morbidity, their etiology has not been elucidated yet. Previously, it was thought that venous hypertension was responsible for such cases by causing valvular insufficiency. However, recent findings indicate that the changes in the venous wall structure may be the main initiating factors of this condition. Matrix metalloproteinase enzyme-2 (MMP2) is one of the enzymes known to have a role in remodelling the extracellular matrix, mainly in vascular structures. *Materials and Methods:* We studied two functional gene polymorphisms in -735 and -1306 regions of the MMP2 gene and their effects on mRNA expression of MMP2. We used a previously defined method for polymorphism analyses, namely PCR-RFLP. *Results:* CC genotype and C allele for MMP2 -735 gene region were more common in the control group, while there was no significant difference between the groups for MMP2 -1306 gene polymorphisms. MMP2 mRNA levels were higher in the group that had both varices and coronary artery disease (CAD). *Conclusion:* There was no significant effect of MMP2 polymorphisms on mRNA expression. As MMP2 mRNA levels were higher in CAD patients with varices compared to the CAD only and varices only groups, it is necessary to perform further studies to elucidate the relationship between CAD and varices.

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LIPID PEROXIDATION AND PARATHYROID HORMONE ARE THE STATISTICAL DETERMINANTS OF CALCIUM IN THE ERYTHROCYTES OF PERITONEAL DIALYSIS PATIENTS

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