Effect of *ABCB1* (*MDR1*) 3435C > T polymorphism on salivary secretion of carbamazepine

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Abstract:
The aim of the present study was to evaluate the effects of *ABCB1* (*MDR1*) gene polymorphism on salivary secretion of carbamazepine. The study was carried out on 51 patients diagnosed with epilepsy medicated with carbamazepine. *ABCB1* polymorphism was evaluated using PCR-RFLP methods. Carbamazepine concentrations were measured in blood serum as well as in saliva using FPIA method. Evaluation of the impact of *ABCB1* 3435C > T polymorphism on salivary carbamazepine secretion did not reveal any significant influence of the genotype. Mean value of Pearson’s correlation coefficient was 0.787. There was a trend towards higher values of the coefficient in *ABCB1* gene 3435CC carriers (0.855) as compared to 3435CT (0.684) and 3435TT (0.672) subjects. It can be stated that *ABCB1* gene polymorphism does not affect salivary carbamazepine secretion.

Key words:
*ABCB1* polymorphism, P-glycoprotein, carbamazepine, salivary secretion