

ASSOCIATION ANALYSIS OF POLYMORPHIC LOCI RS4713902 AND RS7757037 OF THE FKBP5 GENE WITH SUICIDAL BEHAVIOR

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FKBP5 is a critical component of the Hypothalamic-Pituitary-Adrenal (HPA) axis, a system that regulates our response to stress. It forms part of a complex of chaperones, which inhibits binding of cortisol and glucocorticoid receptor translocation to the nucleus. Variations in both the HPA axis and FKBP5 have been associated with suicidal behavior.

Change in FKBP5 gene expression leads to an increase in anxious personality traits. FKBP5 gene polymorphic loci rs4713902 and rs7757037 are functional and affect the expression of the gene. Association of these polymorphic loci with bipolar disorders (Willour et al. 2009), depression (Binder et al. 2009, Tatro et al. 2010) and suicidal behavior (Willour et al. 2009, Brent et al. 2010, Roi 2012) was determined.

The study involved 241 individuals (131 - Russian ethnicity and 110 - Tatar ethnicity) who committed suicide attempts (mean age 31.84±14.79) and are at the time of blood collection in the intensive care unit of the city hospital No. 21 in Ufa. The control group consisted of 359 healthy donors corresponding to their age (mean age 30.0±10.0), sex (136 men and 223 women) and ethnicity (134 Russian and 225 Tatars) to samples of patients who were not registered with a psychiatrist and they denied the existence of a hereditary burden of mental illness.

We studied functional polymorphic loci rs4713902 and rs7757037 of the FKBP5 using PCR-RFLP.

We found no significant differences in the distribution of alleles, genotypes and haplotypes frequencies of SNPs rs4713902 and rs7757037 of FKBP5 gene ($P>0.05$) in Russians and Tatars.

In summary, our study denies the major role of these SNPs of FKBP5 gene for suicidal behavior in Russians and Tatars from the Volgs-Ural region of Russia.

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PSYCHOLOGICAL PECULIARITIES OF THE PERSONALITY OF PARASUICIDENTS

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Two groups of young people were examined. The first group includes 115 people hospitalized in the Department of Crisis Conditions and Psychosomatic Disorders of the Research Institute of Emergency Care named N.V. Sklifosovsky with self-inflicted stab-cut wounds of various localization of mild severity. The control group included 150 mentally healthy persons without suicidal manifestations.

To test the respondents, Russian versions of six psychological tests were used: "Beck Hopelessness Scale" A.T. Beck et al.; "The Psychache Scale" R.R. Holden et al.; "Reasons for Living Inventory" M.M. Linehan et al.; "Death Attitude Profile-Revised" P.Wong et al.; "Fear of Personal Death Scale" V. Florian, S. Kravetz; "Reasons for Attempting Suicide Questionnaire" D. Johns, R.R. Holden (Chistopolskaya et al. 2017).

In the group of people with self-harm there were 74 men and 41 women. The mean age for the group was 31.1±0.1 years. Each of the patients had a history of 1 to 28 autoaggressive attempts, in the vast majority of cases they were committed impulsively and in someone's presence. Taking into account this fact and taking into account the average score on the scale "Manipulative / Extrapunitive" increased 1.3 times ($p<0.001$) compared to the control, it can be asserted that acts of autoaggression of parasuicidents have a demonstrative-blackmailing orientation. They are more afraid of suicide and death, as evidenced by an average of 1.2 times ($p<0.001$) average scores on the scales "Fear of Suicide", "Fear of Death" and "Death Avoidance". Parasuicidents are more sensitive than others in the control group, they have higher moral and moral restrictions on committing suicide, which can be judged by an average of 1.5 times ($p<0.001$) average scores on the scales "Fear of Social Disapproval" and "Moral Objections".

Thus, autodestructive actions of persons deliberately causing physical harm to their health are demonstratively blackmailed and represent a positional form of protest reactions. The risk of repeated acts of autoaggression in them is determined by the personal significance of the microsocial conflict and is limited by the fear of death and the moral prohibitions on suicide.