

LEVEL OF IMPULSIVENESS IN FEMALE ADOLESCENTS WITH NON-SUICIDAL SELF-INJURY

Julia Khutoryanskaya, Vera Pozdnyak & Severin Grechanyi

Saint-Petersburg State Pediatric Medical University, Saint-Petersburg, Russia

Background: Currently there is some data revealing a link between non-suicidal self-injury (NSSI) and disturbances of volitional control, frequently both are referred to single spectrum of psychopathological disturbances. However, level of impulsiveness may differ depending on the nosological group.

Aim: to determine level of impulsiveness, it's components in female adolescents with NSSI.

Subjects and methods: 26 female aged 13-23 years old (mean age - 18.62 ± 0.512 years) being diagnosed: 12 patients (46.2%) - adjustment disorder, personality disorder, conduct disorder (F43.2, F07.0, F91), 10 patients (38.5%) - schizophrenia, schizotypal disorder (F20, F21), 4 patients (15.4%) - eating disorder (bulimia type) (F50).

Adapted Russian versions of "Inventory of Statements about Self-injury", "Barrat Impulsiveness Scale" (BSI-11).

Results: Mean age of NSSI onset - 13.81 ± 0.467 years. Types of NSSI: 12 patients (46.2%) - cutting, 3 patients (11.5%) - biting, 2 patients (7.7%) - hitting self, 4 patients (15.4%) - picking scabs, etc. Mean number of traces after cutting - 109.15 ± 30.013 . 17 patients (75.4%) experienced pain while inflicting self-harm, 7 patients (26.9%) - occasionally, 2 patients (7.7%) didn't experience pain. 23 young females (88.5%) inflicted self-harm being alone. BSI-11 total score for the entire sample of 70.08 ± 2.423 indicates pathological level of impulsiveness. There was no quantitative difference in number of self-injuries, but patients from different nosological groups had different mechanism of inflicting self-injury. Significant Spearman's correlations between BSI-11 total score and motives of affective regulation ($\rho=0.542$) were identified in patients with adjustment disorders, personality disorders, conduct disorders. There was inverse correlation between motives of affective regulation and attentional factor of impulsiveness ($\rho=0.420$). Group of schizophrenia, schizotypal disorder demonstrated strong correlation between attentional factor and motives of affective regulation ($\rho=0.749$), between nonplanning factor of impulsiveness and motives of affective regulation ($\rho=0.568$). Impaired ability to plan own actions was higher in patients with schizophrenia, schizotypal disorder (22.90 ± 0.983) compared to group with adjustment disorders, personality disorders, conduct disorders (20.29 ± 0.828) ($t=2.034$, $p=0.052$).

Keywords: non-suicidal self-injury - impulsive behavior - impulsiveness - adolescents - young females

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STUDY OF AFFECTIVE DISORDERS RELATED TO THE REPRODUCTIVE CYCLE IN ADOLESCENT GIRLS

Andrey Koshchavtcev

Saint-Petersburg State Pediatric Medical University, Saint-Petersburg, Russia

According to B.E. Mikirtumov (1996), depressive reactions are observed in 41% of girls with disorders of the reproductive cycle. Emotional reactions and conditions are quite clearly reflected in changes in the bioelectrical activity of the brain (according to the EEG).

The purpose of our study was to find out the features of the functional state of the brain (according to EEG) in adolescent girls with reproductive cycle disorders, depressive reactions compared with older women.

The study involved 200 girls with menstrual disorders at the age of 15.47 ± 1.44 years. The study involved 20 women over 50 years of age (mean age 56.6 ± 3.9) and 28 women under the age of 50 years (mean age 33.9 ± 9.1) as comparison groups. EEG recording was performed on a Mitsar encephalograph, in a shielded room. Taking into account the combination of these criteria, we identified 5 types of the general EEG pattern of calm wakefulness in women and adolescent girls with menstrual disorders.

Data were obtained that showed a link between the type of EEG and the syndromal diagnosis in adolescent girls with menstrual disorders. According to the Beck scale, 21.5% of depressed adolescent girls were in our sample. On the Beck scale, women in the comparison group 50+ score on average more points and have more pronounced depressive states when compared with the first comparison group. EEG patterns in depressions associated with the reproductive cycle in women indicate an imbalance of the effects of the regulatory systems of the brain. The imbalance of the effects of the regulatory systems of the brain is likely caused by fluctuations and a partial decrease in estrogen levels.

Key words: adolescent girls - reproductive cycle - EEG patterns - depressive reactions