RISKS OF AFFECTIVE PATHOLOGY DIAGNOSTICS IN HIV-INFECTED PATIENTS

N.N. Osypova[1], Nikolay Beglyankin[2], V.M. Zaitseva[1] & Leonyd Bardenshtein[2]

[1]Smolensk State Medical University, Smolensk, Russia
[2]A.I. Evdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia

Background: Affective pathology in HIV-infected patients, including hypomanic and manic states, can significantly increase the risk of HIV infection because of a risk-taking sexual behavior as well as impulsivity and use of psychoactive substances. The risk of bipolar affective disorder in patients with HIV infection is 50% higher than in uninfected individuals of a similar social status.

However, despite high prevalence of affective pathology among HIV-infected patients, depressive and hypomanic as well as manic states are commonly misdiagnosed and treated. Early identification of hypomanic states represents one of the most urgent health problems since many patients do not consider the conditions as abnormal. Nowadays screening methods of diagnostics, contributing to earlier identification of hypomanic states are commonly used in medical practice.

The aim of the study was to assess potentials of screening psychodiagnostic methods to identify the risks of affective pathology of the bipolar spectrum in HIV-infected patients with risk-taking behavior manifested in psychoactive substance abuse (PAS) and a tendency to have multiple sexual contacts.

Subjects and methods: The study of medical history data and screening psychodiagnostics in HIV-positive individuals were carried out with involvement of volunteer participants who had signed a written informed consent. The study was performed on the basis of "Smolensk Center for AIDS Prevention" and involved 36 participants aged 32.3±5.9. To assess the risks of affective pathology development, the following methods were used: Bipolar Spectrum Diagnostic Scale (BSDS; Pies 2005); Mood Disorders Questionnaire (MDQ; Hirschfeld 2000); Diagnostic Questionnaire on Bipolar Disorder (Hypomania Checklist (HCL-32); J. Angst 2005), validated in Russia by C. Mosolov (2014). Case history data were used to study the propensity to risk-taking behaviors manifested in multiple sexual contacts and the use of psychoactive substances. Statistical data processing included methods of descriptive statistics. Sample characteristics were given as +standard error of the mean. The construction of the confidence interval (CI) was carried out according to the formula for fractions and frequencies (the Wald's method). The reliability of the differences between the studied features was evaluated with the F-test. The statistical validity of the assessed parameters was recognized at >95% probability ($p<0.05$). Statistical analysis of the results was performed with Microsoft Excel 16 "Data Analysis" application. All experimental and clinical procedures were performed in full accordance with international ethical requirements for research.

Results: Study of HIV-infected patients medical history data disclosed that by the time of the study, all respondents had been taking psychoactive substances (100%; CI:100.0), primarily alcohol (63.3%; 54.4-72.1), alcohol was used predominantly by males (40%; 31.1-48.9) compared to 23.3%; CI:15.5-31.1 in women. Heroin took the second rank among psychoactive substances (13.3%; 1-19.5) with predominance in females (10%; CI: 4.5-15.5 compared to 3.3%; CI: 0.1-6.6 in males). The particular focus of the study was use of alcohol jointly with heroin, methamphetamine, and desomorphine.

Assessment of sexual activity at the time of the study in HIV-infected patients disclosed that the majority of patients had had sexual intercourse with 3-5 partners (40%; CI: 31.1-48.9). By the time of the study 24.7% participants had had from 5to 10 sexual partners, with predominance in men (23.3%; CI; 15.6-31.1 compared to 10.0%; CI: 4.5-15.5 in women.

Assessment of the risk of bipolar disorder with the MDQ scale failed to reveal any excess of the screening threshold: 4±0.6; CI: 3.3-5.6 in males, 2.9±0.4; CI: 2.2-3.7 in females. Also, the average values on the BSDS scale did not exceed the thresholds and showed no signs of bipolar disorder (5.4±0.6; CI: 4.2-6.6 in males and 4.7±0.4; CI: 3.9-5.5 in females). As for the average values on the HCL-32 scale, they did not exceed the normal rates as well (6.4±0.5; CI:5.5-7.4 in males and 6.4±0.7; C: 5.1-7.7 in females).

Conclusions: Despite the identified signs of risk-taking behaviors, manifested in multiple sexual contacts together with psychoactive substances, the screening methods mentioned above failed to identify signs of hypomania in the clinical sample. These results of screening diagnostics might be associated with the lack of subjective assessment of the emotional status in patients because of an underlying disease, complicated by psychoactive substance abuse, as well as antiretroviral therapy. The increase in the number of individuals involved into the study, along with investigation of cognitive characteristics in HIV-infected patients can contribute to a more objective assessment of their emotional status especially using screening scales to identify the affective pathology at early stages.