



Comorbidity of the Course of Affective Disorders in Opiate Addiction with the Consequences of Traumatic Brain Injury

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Abstract: The medical and social significance of opium addiction, despite the reduction in opium consumption in the Republic of Uzbekistan, [8,11] remains relevant to date, because opium addiction is one of the most "malignant", the severity of complications and consequences of which are a social and economic burden on society. In recent years, there has been a steady decline in the proportion of registered and newly identified cases of drug use of the opium group. Despite the greatest prevalence of this category of patients in our region (the "leadership" remains in the Samarkand, Surkhondaryo and Fergana regions), since 2000 the consumption of drugs of the opium group (opium, heroin, kuknar) has become less than cannabis (hashish, marijuana, anasha). Statistics on the chronization of opium addiction, joining or transformation into alcoholism remain disappointing. Affective disorders are obligately present at all stages of drug addiction, and at the stage of post-withdrawal syndrome, within the framework of pathological attraction to opioids, lead to the return of patients to active anesthesia, worsening the course and reducing remission.

Another urgent medical problem is neurotrauma, the prevalence of traumatic brain injury (TBI) among the population reaches up to 20% [1,2], and among the contingent with alcohol and drug addiction it is even higher. The consequences of mild TBI (concussion of the brain) and moderate severity (brain injury) are characterized by a predominance of borderline mental disorders [4, 6], among which affective disorders occur in up to 70% of cases [7]. And directly under the supervision of a psychiatrist, the spectrum of borderline-level diseases is more than half neuropsychiatric disorders of exogenous organic etiology.

Analyzing the frequency of affective disorders in the long-term period of traumatic brain injury, the predisposition to addictive behavior of persons with premorbid residual organic background, the prevalence of traumatism in patients with addiction syndrome, as well as the dominance of affective disorders in the post-withdrawal state, we can talk about the relevance of the study of the comorbidity of the consequences of traumatic brain injury and opium addiction. In the domestic and foreign literature, the question of the combination, relationship and conditionality of these two conditions has not been sufficiently developed [2,9,10], the mechanisms of the occurrence and course of opium addiction and the features

of the formation of affective disorders in the postabstinent period in patients with the consequences of TBI have not been studied enough [8,11].

Thus, all of the above was a reasoned basis for conducting this study.

The purpose of the study - to study the clinical, psychopathological and prognostic features of affective disorders in the postabstinent period of opium addiction in comorbidity with the consequences of traumatic brain injury.

Material and methods of research

We examined 48 patients in the post-abstinence period, opium addiction, who were treated on an outpatient or inpatient basis in a medical center and a dispensary in the period from 2020 to 2022. All patients were male, in the age range from 36 to 60 years. The duration of the disease is from 4 to 30 years. The daily dose of opium ranged from 0.25 to 0.5 grams of opium, and was administered orally with liquid 1 time a day. Alcohol was abused by 18 of the 48 surveyed.

The patients were divided into 2 groups identical in terms of the studied characteristics, the main group included 28 patients with opium addiction who had suffered a closed traumatic brain injury of mild and moderate severity, all the injured belonged to the category of primary, isolated and closed TBI, were observed in the long-term period, more than 10 years before the formation of dependence on opium. The second control group consisted of 20 patients in the postabstinent period of opium addiction without a history of TBI.

Inclusion criteria:

- patients with opium addiction, with formed opium withdrawal syndrome;
- patients in the long-term period of TBI (more than 10 years before the formation of dependence on opium) of mild severity;

Exclusion criteria:

- patients with combined drug use;
- patients with endogenous mental illness;
- patients with epilepsy provoked by opioid addiction;
- patients with comorbid organic morpho-destructive pathology of the brain;
- patients with opium addiction in comorbid who have suffered moderate and severe TBI, TBI in early childhood and more than 10 years before the formation of dependence on opium;
- the presence of HIV infection;

Clinical and dynamic indicators of opioid dependence in patients of the following group are represented by the onset of opium intake occurred in 55.6% of cases under the age of 16-18 years. The period of episodic use was very short, lasted from 2 weeks to 1 month, was replaced by a systematic intake. The period from the beginning of taking heroin to the appearance of signs of withdrawal syndrome took place in a short time, in most cases it was not possible to trace it due to the continuous use of the drug. The duration of the disease in the studied patients varied from 8 months to 8 years. The majority of patients in the presented sample (34.4%) had a disease duration of up to four years. All patients with heroin addiction at the time of the study took a daily dose of opium ranged from 0.25 to 0.5 grams of opium, and was administered orally with liquid 1 time a day. Tolerance in the studied sample of patients ranged from 0.3 to 3.0 grams of "street" heroin per day.

26.7% of patients in this group had no history of remission, short-term remissions (less than 3 months) were in 37.8% of cases. Remissions of more than 1 year were observed in 4.4% of the presented sample.

All patients under observation underwent a standard comprehensive examination: clinical and psychopathological, using a card of epidemiological study of drug addiction patients (Ivanets N.N., 2010); the data of medical documentation on the suffered TBI, the severity of the consequences, neurophysiological examination of EEG, CT, MRI were used, the level of anxiety and depression was assessed according to the hospital depression anxiety scale HAD: F40-48 When qualifying premorbid personality traits, the classification of psychopathies Gannushkina P.B., Kerbikova O.V. was used, taking into account the age characteristics of the formation of psychopathies, depending on from their genesis (Guryeva V.A., Gindikina V.Ya. 1980) and the classification of character accentuations by A.E. Lichko.

The results of the study.

1. The analysis of the obtained data revealed a high hereditary burden of alcoholism in patients of both groups (38 cases per 60 patients), mainly on the father's side (18 out of 60 examined patients). Among the factors of hereditary burden, the father's alcoholism is in the first place (18.5% (10) of the main group and 16% (8) of the control group) When analyzing hereditary burden in the main (with a history of TBI) and control (without TBI) groups, the father's alcoholism is 18.5% and 16% in the first place in frequency of occurrence, the mother's alcoholism is 9.3% and 8% in the second, which indicates the significant role of hereditary factors for the occurrence of dependence on surfactants.

2. Character accentuations were detected in 70.2% of patients (75.9% of patients in the main group, 64% of patients in the control group). Hyperthymic, hysteroid and unstable traits in various combinations. In 8 people (7.8%), psychopathy of a predominantly affectively labile and unstable circle was diagnosed, attention is drawn to the high frequency of mental infantilism (16 patients, 9 people in the main group, 7 people in the control group) and primitiveness in the premorbid of the examined.

The premorbid features of the examined patients are mainly represented by character accentuations, the predominance of accentuations in the main group (with a history of TBI) (75.9%) over the main group (without TBI) (64%). This distribution may be associated with a greater representation of unstable circle accentuations in group I (TBI under the age of 3 years) and a higher frequency of hysterical circle accentuations in patients in group II (TBI aged 3 to 10 years).

3. In the social status of patients of the main group (with a history of TBI) in relation to the control group (without a history of TBI), a smaller number of patients with completed secondary education 90.7% and 100% were revealed. When assessing professional employment, work with the prospect of growth in patients of the main group was found only in 7.4%, while in the control group - 18, have a job with the threat of dismissal and do not work, respectively, 68.5% in the main and 50% in the control groups. In marital status, patients of the main group (with a history of TBI) were married in 35.2%, and in the control group - in 42%. Thus, social adaptation in patients of the main group is at a lower level, which is characteristic of patients with residual organic brain damage

4. During the EEG study in 76% of patients (79) of the entire sample (the main group was 76% (39), in the control group - 76% (38)) diffuse changes in the electrical activity of the brain, mainly the median structures of the brain, were revealed. In 12 (11.5%) of the total number of patients, a decrease in the threshold of convulsive readiness without the development of paroxysms was revealed. There was no difference in the frequency of pathological electroencephalographic changes between the main group - 11.1% (6) and the control group - 12% (6). In patients of group I (TBI under the age of 3 years) we can

talk about the psycho-organic syndrome, which gives the symptoms a dysphoric, pathoharacterological pattern in the postabstinent period.

5. Analyzing the features of the course of opium addiction in the main (and control) groups, there was a reduction in the duration of the formation of mental/physical dependence on opium 1.1/3.2 months and 1.3/4.1 months, higher average daily doses of opium 0.87 grams and 0.72 grams, and there was a greater severity of acute withdrawal syndrome 2.5 points and 2.2 points, respectively. Therefore, we can talk about the malignant course of opium addiction in patients with comorbid traumatic brain injury

Analyzing psychopathological disorders in patients with opium addiction, with long-term consequences of TBI in various age periods, the following patterns were revealed:

The severity of affective disorders in the main group was significantly more TBI than in the control group without a history of TBI.

Thus, it is possible to assume the presence of a psycho-organic syndrome, which gives a dysphoric, pathoharacterological pattern to symptoms in the postabstinent period.

CONCLUSIONS

1. The comorbid course of alcoholism with the consequences of moderate TBI (brain injury) is more often represented by subdepression with a dysphoric component, increasing the severity of affective disorders in the post-withdrawal period, returning patients to active alcoholism, worsening the course and reducing remission.
2. Lengthening the postabstinent period of anamnesis lengthens the postabstinent period (due to the greater severity of affective disorders in the structure of pathological attraction to heroin, which is expressed in a longer reduction of subdepressive symptoms, reducing remission and increasing relapses.
3. The consequences of moderate TBI (brain injury) are characterized by the formation of clinical and neurological symptoms, foci of morphodestruction on MRI, deficiency and asymmetry of hemodynamics in the ICA basin with TCDH and changes in frequency-amplitude EEG indicators with the presence of persistent regional EEG patterns. Does not exclude the formation of a psycho-organic syndrome.

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