ANALYSIS OF CHANGES IN PERSONALITY OF FEMALE OPIUM ADDICTS IN CORRELATION WITH CLINICAL-DYNAMIC CHARACTERIZATION OF DRUG MORBID ATTRACTION

There are four types of postabstinent drug morbid attraction (DMA) in the female opium addicts, such as, emotionally labile, depressive, depressive-restless and dysphoric. Between pairs of patient samples, such as, unstable and hysteroid, unstable and hyperemetic as well as unstable and psychoastenic types of personality significant differences were established. The differences found, probability of prediction for various types of DMA exacerbation in patients with various types of personality can be improved and differential psycho-pharmacotherapy subsequently evaluated.

Keywords: Drug morbid attraction, female opium addicts, heroin, personality types

UDC:

Introduction

Opium (heroin) addiction is one of the most severe substance dependence disorders (Kochargina and Koshkina, 1997; Sivolap and Savchenkov, 2005). Due to geographical as well as to specific geopolitical and social conditions the rates of drug addiction expansion in the Central Asia are much higher as compared with those in other regions (Sadvakasova, 2008). High social and clinical significance of opium addiction govern the urgency of study on clinical-dynamic peculiarities and rehabilitation scope with gender of drug addicts taken into special account (Anokhina, Ivanets and Shamakina, 2004). A number of publications have addressed gender peculiarities of heroin addiction (Aksyonov, Krylov, Kvachegina, and Gusev, 1998; Kochargina and Koshkina, 1997; Rokhlina and Mokhnachev, 2003; Yadrova, 2005). However, in these studies the problem of the gender-role drug addicts’ dimorphism as well as epistemological field of their consideration is restricted to comparison of substance dependence characteristics in the frames of the “female-male” dilemma.

Due to intrinsic drug addiction diversity and variability of clinical manifestations physicians in everyday practice have to face the necessity to solve more intricate problems both in diagnosis and treatment (Anokhina et al., 2004; Vinnikova, 2004). Drug morbid attraction (DMA) in opium addicts can be observed within the period of acute withdrawal syndrome and postabstinent period with the withdrawal disorders having been completely arrested. DMA exacerbations occurring within postabstinent period cause disturbances of regime and pre-schedule termination of treatment. Interfering with implementation of therapy program they constitute quite a separate problem to be solved with its clinical peculiarities taken into account.

The work was initiated to perform clinical-psychological analysis of changes in the personality of female opium addicts in accordance with clinical-dynamic DMA characterization.

Materials and methods

We examined 50 female opium addicts hospitalized at the Tertiary Detox Center, Public Health Ministry, Republic of Uzbekistan (Tashkent) from 2009 to 2012 (mean age 32.1 ± 1.16 years; Me 31 years; 95%CI 20.8-34.4) To be included into the study the patients were
to be diagnosed with “Mental and behavioral disorders due to use of opioids, drug dependence syndrome” (International Statistical Classification of Diseases and Related Health Problems, ICD 10 code F 11.2) or with “Withdrawal state” (ICD 10 code F 11.30) and to be from 18 to 50 years of age. Patients with endogenic mental derangements, complicated with drug addiction and those unattainable for follow-up as well as the cases of the combined drug addiction and cases of replacement with heroin of other psychoactive substances were excluded from the study.

Mean age for drug use onset was 24.5 ± 1.05 years (Me 22.5 years, 95%CI 22.4-26.4), heroin abuse duration ranging from 1 to 20 years. Most patients (46-92.0%) were found using heroin intravenously, 17 (34.0%) of them practicing the procedure from the very drug abuse onset. Heroin addiction stage 2 as per classification by Pyatnitskaya, (1994, 2002) was diagnosed in all patients. Assessment of premorbid peculiarities was based upon data from medical history and physical examination in compliance with classification by Gannushkin, 1933; Kerbikov, 1965. Personal peculiarities of the patients were studied by means of MMPI (Minnesota Multiphasic Personality Inventory), DMA assessment being performed by means of special clinical DMA scale reflecting psychopathological structure of the syndrome (Vinnikova, 1999). The scale included ideational sphere (presence of constant or intermittent thoughts about the drug, flashbacks and imaginations), affective illness and autonomic disorders, dynamics of sleep and pain syndrome as well as behavioral and asthenic disorders.

The data was accumulated and processed by a standard “Microsoft Office Access 2003 for Windows XP” software package. The confidence of parameter differences in the sample was assessed by a non-parametric criterion χ² (Pearson’s). Minimum significant level was set at P>0.05. Odds ratio with 95% confidence interval (CI) was calculated for each factor. Written consent take part in the study was obtained from all patients.

**Results and discussion**

The study revealed four types of personality changes, to mention unstable, hysteroid or demonstrative, hyperemic and psychoasthenic. Hysteroid type of personality change was found in 18 (36%) patients with drug abuse onset at 17-18 years of age. Premorbid hystera-explosive accentuations were found in 11 patients of the group. The patients started using heroin constantly in 2-3 months after onset, intravenous administration either prevailed or being transferred to within the first half year period. Psychopathic disorders, such as, hystera-explosive reactions, irritability and ostentation were typical of the whole period. In 4 patients psychopathy-like states with acute curbing of interests and inactivity were registered, affective lability being represented by dysphoria both on the subsidence of intoxication and out of it.

High hereditary alcoholic burden was found in a group of opium addicts with unstable personality (n=18, 36%), premorbid deviant forms of behavior, such as, thefts, runaways, poor school attendance and early sexual debut being registered in 14. Brought up, as a rule, in socially handicapped and incomplete families with low income the patients suffered somatic burden, viral and toxic injury of the liver and HIV infection (n=10). Lack of psychoactive substance abuse criticism, asocial style of life and persistent reluctance to be treated were typical of these patients. Marked moral-ethic depreciation manifesting in total emotional induration, deceitfulness and lack of sense of shame and duty were characteristic of these women completely indifferent towards childrearing.

Eight (16%) hyperemic patients were party-free in relation to alcohol and drug abuse. Two women demonstrated premorbid infantilism and instability, in the rest premorbidity seemed to be normal. These patients are goal-oriented and ambitious. Their inclination to psychoactive substances is associated with their active position and desire to experience something novel and unusual. Contrary to patients in other groups they use psychoactive substances being highly spirited. As a rule they started to use heroin with the party, mostly intranasally. There was a delay in formation of dependence syndrome, morbid attraction
shaping being backward and perceived by these women in 4-5 months of episodic use only. Tolerance grew smoothly, attaining maximum in 4-6 months after systematic use onset.

The group of women with psychoastenic features was the smallest one (n=6, 12%). Neither premorbid accentuation of character nor deviant behavior was registered. Here the drug served as a communicatory stimulus to be resorted to when actively communicating with the peers, that is, before party, date or presentation. Frequently situational psychic dependence appeared close to mechanism of obsessions when no communication seemed possible without preliminary stimulation.

Postabstinent period is characterized with disappearance of integral picture of withdrawal syndrome, with its fragmentation and dissipation of pain and autonomic disorders. As compared with men postabstinent DMA exacerbation in women is characterized with greater diversity, the fact allowed emphasizing emotionally labile, depressive, restless and dysphoric variants. DMA prevalence in various types of personality can be seen in the Table.

**TABLE 1. DRUG MORBID ATTRACTION IN PATIENTS WITH VARIOUS TYPES OF PERSONALITY**

<table>
<thead>
<tr>
<th>Type of personality</th>
<th>Emotionally labile, n=22</th>
<th>Depressive, n=12</th>
<th>Dysphoric, n=8</th>
<th>Restless, n=8</th>
<th>Total, n=50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abs.</td>
<td>%</td>
<td>Abs.</td>
<td>%</td>
<td>Abs.</td>
</tr>
<tr>
<td>Psychoasthenic</td>
<td>2</td>
<td>9.1</td>
<td>1</td>
<td>8.3</td>
<td>-</td>
</tr>
<tr>
<td>Hypertemic</td>
<td>4</td>
<td>18.2</td>
<td>3</td>
<td>25.0</td>
<td>-</td>
</tr>
<tr>
<td>Hysteroid</td>
<td>14</td>
<td>63.6</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Unstable</td>
<td>2</td>
<td>9.1</td>
<td>8</td>
<td>66.7</td>
<td>4</td>
</tr>
</tbody>
</table>

In the examinees the emotionally labile type was observed confidently more frequently than the depressive one (OR 2.49; 95%CI 1.06-5.86; P=0.05), dysphoric and restless (OR 4.13; 95%CI 1.61-10.6; P=0.005).

Among emotionally labile women hysteroid type of personality prevailed (OR 17.5; 95%CI 3.22-95.2; P<0.0001). In other DMA variants persons with unstable type of personality were registered more frequently, though unconfidently.

As to DMA exacerbation variants, they can be characterized as follows.

1. In 22 (44%) emotionally labile patients DMA exacerbation manifested in instability of emotional reactions, such as, lacrimation, acute spirit lowering after unpleasant conversations about drugs, irritability, diffidence of possibility to live heroin-free, while ability to be distracted from sad thoughts preserved. DMA exacerbation is non-conscious; scale for assessment of anxiety and depression showed changes in the emotional state of patients too. Clinically significant level of anxiety and depression was found in 16 (72.7%) patients. Total anxiety/depression score was 11.4±0.44 (Me 11, 95%CI 10.7-12.0)/11.2±0.29 (Me 11; 95%CI 10.6-11.8). As a whole, the DMA syndrome scored 16.5±9.21 to be the evidence for high morbid attraction, affective, ideational and behavioral components scoring 6.27±0.21, 2.6±0.1 and 1.0, respectively.

2. In 12 (24%) patients depressive variant of postabstinent DMA exacerbation was found. Changes in their condition were observed on the 11th-14th day. Weakness and melancholy appeared, the patients were bored with their staying at the hospital characterized by them as “pressing of the walls”, insisted upon discharge believing that “they will feel much better at home” and found causes to go away and to take a respite from people. We observed inertia, low spirits, pessimistic evaluation of capability to do without the drug, shiftlessness and indifference to others as well as reluctance to have a dialogue with a physician. Clinically significant level of anxiety and depression was found in 7 (58.3%) patients; mean score corresponded to subclinical anxiety level being 10.7±0.41. Total depression subscore was 12.7±0.46 (Me 12.5; 95%CI 11.8-13.6)
to be the evidence for depression level clinically manifesting. As a whole, the DMA syndrome scored 17.3±0.52, affective, ideational and behavioral components scoring 7.08±0.23, 2.83±0.11 and 1.0, respectively.

3. Dysphoric variant of postabstinent DMA exacerbation was registered in 8 (16%) patients. As a rule, changes in the patients’ condition were observed on the 8th-10th day. The patients became embittered, irritable, displeased with everything, failed to keep a distance in relationship with medical staff, being rude and finding fault with the others without cause. The patients remained low spirited, avoiding dialogues with physicians and expressing discontent towards them. The patients denied their attraction to the drug, autonomic reactions being registered as a response to the drug reference and enquiry about it. Clinically significant anxiety level was found in 62.5% of patients with dysphoric DMA, anxiety mean score being 11.4±0.53 (Me 11; 95%CI 10.3-12.4), the one for depression being 11.1±0.35 (Me 11; 95%CI 10.4-11.8). As a whole, the DMA syndrome scored 19.3±0.41, affective, ideational and behavioral components scoring 7.25±0.25, 3 and 1.75±0.16, respectively.

4. Depressive - restless DMA variant, subsequently referred to as restless, was found in 8 (16%) patients. Inability to resist the temptation to use drugs, apprehensions, inner unrest, blues, shapeless discomfort, negative anticipatory thinking about impending relapse, intermittent and superficial sleep were typical. These patients did not deny their attraction to heroin. Testing with the hospital inventory demonstrated anxiety score to be 13.9±0.63 (Me 14; 95%CI 13.0-14.7). Clinically significant anxiety level was observed in all patients, depression subscore demonstrated subclinical depression (11.6±0.63; Me 11, 95%CI 10.4-12.9). Total DMA scored 17.8±0.45 to be the evidence for severe heroin attraction, affective, ideational and behavioral components scoring 7.1±0.23, 3 and 1, respectively.

Comparative analysis of various postabstinent DMA exacerbation variants in the female opium addicts demonstrated higher total score for anxiety in patients with the depressive-restless DMA variant (P<0.001), depression level being higher in patients with depressive DMA exacerbation variant (P<0.001). We have managed to register significantly high total score for DMA exacerbation in patients with the dysphoric variant (P<0.01). It should be noted that affective component prevailed in all postabstinent DMA exacerbation variants.

**Conclusion**

Postabstinent period of heroin morbid attraction exacerbation was found characterized with affective, behavioral and sonic disturbances. Four clinical variants, such as, emotionally labile (44.0%), depressive (24.0%), dysphoric (16.0%) and restless (16.0%) have been observed, emotionally labile type occurring confidently more frequently. The patients with hysteroid and labile types of personality prevailed. Total anxiety score was confidently higher in patients with depressive-restless DMA exacerbation variant, depression level being higher in those with the depressive one.

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