

ANALYSIS OF PSYCHOPHARMACOTHERAPY OF OPIOID DEPENDENCE SYNDROME AT CONSTANTLY CHANGING STAGES OF THE TREATMENT PROCESS WITHIN A TEN-YEAR PERIOD

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Background: Despite the different pharmacotherapy regimens, opioid withdrawal syndrome (OWS) is associated with significant risks of complications. Arresting this condition remains one of the important problems of addiction medicine. Two main schemes (protocols) for arresting OWS have proven their efficacy, i.e. clonidine scheme and buprenorphine protocol. On the territory of the Russian Federation, treatment of opioid dependence syndrome begins with the single-step drug withdrawal. The use of a “substitution therapy” is prohibited. Clonidine, i.e. an alpha-2-adrenergic blocking agent, inhibits adrenergic excitation. It impacts mainly the OWS’s somatic and vegetal component. It weakly affects mental disorders and does not drowse. At doses necessary to suppress opiate withdrawal symptoms, it causes persistent hypotension, bradycardia, decreased stroke volume, and often conduction disturbance in the AV node. The therapeutic concentration of the drug is 5 ng/ml, while the toxic concentration is 15 ng/ml. The main disadvantage of the clonidine protocol is a pronounced central depressive effect. In the structure of morbid attraction to the drug, there predominate affective disorders of the depressive spectrum. Manifestations of the algic component are a trigger for affective disorders and behavioral reactions that require immediate therapeutic intervention.

The purpose of this study is to reconstruct some errors in the complex treatment of opioid withdrawal syndrome. Clonidine (clopheline up to 900 mcg/day) was prescribed to patients as the main scheme (protocol) for arresting OWS, in combination with basic and symptom-controlled therapy, which included benzodiazepines, GABA-ergic anxiolytics, typical and atypical antipsychotics, and antidepressants.

Subjects and methods: The study was conducted inpatient. Criteria for inclusion into the study: diagnosed opioid dependence according to ICD-10; age 18-60 years; initial phase of opioid withdrawal syndrome; treatment period 2000-2009. Exclusion criteria: established diagnosis of psychotic disorder, syndrome of dependence on two or more chemical agents, somatic pathology at the stage of decompensation, and HIV infection.

75 patients with OWS have been screened. 46 people were included into the study.

Study design: A simple sampling of 146 completed cases of medical care, followed by an attempt to reconstruct the therapy. The case reports describe 46 patients having opioid withdrawal syndrome (F11.30).

Methods of statistical analysis: The research database was conducted using the SPSS statistical package and the double entry technique. To compare the groups as to the indicator of OWS therapy completion, an analysis was conducted on the event of global dropout (OWS therapy). To compare groups for reasons of OWS therapy completion, there were built contingency tables, while Fisher’s exact test was used.

Results: When analyzing the case histories from 2000 to 2009, the study time was divided into periods from 2000 to 2003; from 2004 to 2005, and from 2006 to 2009. It was during these time periods that therapeutic algorithms were significantly different. Studying the causes of this phenomenon was not part of the research objectives.

The criterion of “Compliance with the stages of treatment” (sequential passage of each stage of inpatient treatment) was selected as the indicator of “Sufficient therapeutic efficacy” of the drug algorithm. Violation of the passage of the stages of treatment is designated as “Disruption of the stages of treatment”. When analyzing the results, the disadvantages of therapy that led to the development of complications (development of delirium, refusal of treatment) were taken into account. When conducting clinical trials in accordance with a symptom-regulated protocol, the number of additional prescriptions of drugs that affect the main symptoms of the disease is one of the important indicators of effectiveness.

For the period between 2000 and 2003, typical neuroleptic predominated in treatment regimens. During the period of acute abstinence disorders, they were used in 100% of cases. Antidepressants with a predominantly sedative effect were second in frequency of use. During acute withdrawal symptoms, benzodiazepine anxiolytics were actively used, which corresponded to the pathogenesis of the disease. The use of atypical antipsychotics, anticonvulsants ranks third (Figure 1).

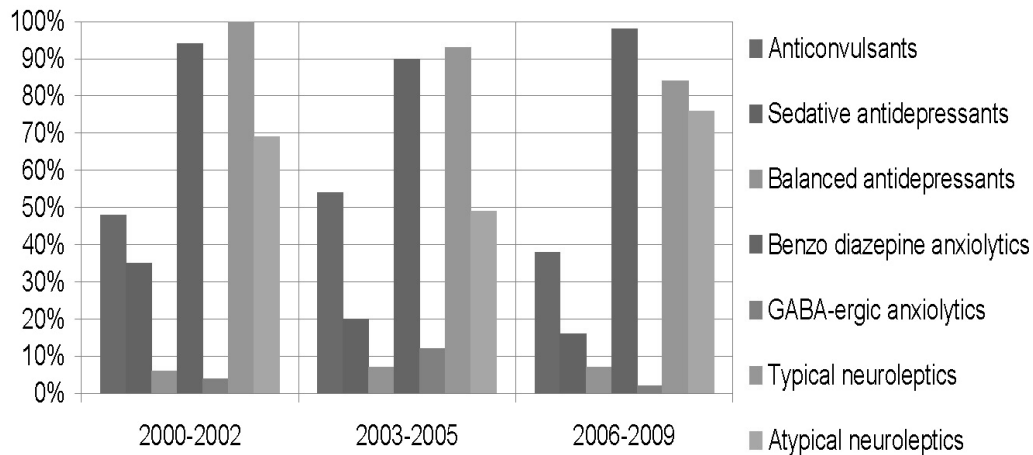


Figure 1. The structure of drug prescriptions for patients suffering from opioid dependence syndrome during inpatients treatment. Period of acute abstinence disorders

In 2003-2005, a high level of typical neuroleptics application remained. Benzodiazepine tranquilizers prevail at the initial stage of treatment. Antidepressants with sedative effect and atypical neuroleptics come third. The use of antidepressants was increasing in the late stages of therapy. In 2006-2009, there was observed a depletion of drug supply and an emphasis on the use of atypical neuroleptics. Typical neuroleptics predominated at the stage of withdrawal symptoms.

In 2003-2005, more refusals were in the later stages of treatment. In 2006-2009, refusals in the early stages of treatment prevailed. The cases of polymedication have been treated separately. Patients with polymedication were more likely to experience intoxication delirium (According to the Fisher criterion: $p=0.02$, if cases of refusal from treatment are included (but without delirium) in the “without disruptions” group, $p=0.026$, if only the “without disruptions” group is compared). This result does not contradict the hypothesis that polymedication increases the risk of complications.

Conclusions: There is a urgent need to apply an interdisciplinary approach and to consider the OWS within the concept of neuroinflammation. Achieving the maximum effect of the treatment used is possible by monotherapy application, the early use of antipsychotics and neuroinflammation regulators, i.e. SSRI drugs. It is important to observe the principle of minimum sufficiency when prescribing treatment. Polymedication when treating narcological patients is unacceptable, and it can provoke an unfavorable outcome of hospitalization.

Keywords: craving - dependency syndrome - opiate addiction