SUPPOSED MECHANISMS OF INFLUENCE OF THE HEPATITIS C VIRUS ON THE DEVELOPMENT OF NEUROPSYCHOLOGICAL DISORDERS

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Introduction/Objectives: Hepatitis C virus (HCV) infection produces a chronic systemic disease that induces chronic hepatitis, cirrhosis and hepatocellular carcinoma. In addition to its effects on liver, patients with chronic HCV infection may present with a range of extrahepatic symptoms including neuropsychiatric disorders. These extrahepatic manifestations are independent of severity of the underlying chronic liver disease and hepatic encephalopathy. The presence of HCV-associated neuropsychological disorders has a significant impact on the quality of life and wellbeing of patients with HCV. The aims of this review are to summarize recent literature looking at the associations between psychosocial and neurocognitive factors and HCV, identify the most common neuropsychological disorders and consider the probable mechanisms of mental and cognitive impairment in patients with HCV.

Subjects and methods: PubMed/Medline was systematically searched for psychosocial and neurocognitive factors associated with hepatitis C and patient wellbeing. In this review 83 valid articles were analyzed from 1994 to 2018. Results: According to the literature review in the group of HCV-positive patients were found a significant decrease in higher cognitive functions: memory impairment, concentration and listening. These manifestations of cognitive dysfunction are supposed to be similar to the early symptoms of Alzheimer’s disease. An increased risk of developing dementia (including Alzheimer’s disease) has also been noted. The most frequently diagnosed symptoms were fatigue and sleep disturbances, associated with mood disorders diagnosed in 19.2 % of cases. Several mechanisms have been considered to explain the pathogenesis of neuropsychiatric disorders observed in chronic HCV infection: 1) the concept of the direct neuroinvasion of HCV; 2) derangement of metabolic pathways (including alterations in neurotransmitter circuits); 3) cerebral or systemic inflammation.

Conclusions: HCV’s impact on quality of life and wellbeing has serious clinical and social consequences. Considering the serious extrahepatic implications for individuals, it is imperative that healthcare professionals pay close attention to neurocognitive factors, especially since early manifestations of neuropsychological disorders are similar to early symptoms of Alzheimer’s disease and the risk of dementia in this group of patients is significantly higher. To date, the mechanisms of various mental and neurological disorders in patients with chronic HCV infection have been partially identified, but the long-term effect of these changes requires further study. Further research in this area may provide a potential opportunity to create targeted therapy that could significantly improve the quality of life of patients with HCV.

POSTMORTEM ANALYSIS OF TEENAGERS SUICIDES

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Difference in formation and dynamics of suicide behavior of teenagers and adults doesn’t allow to use uniform principles of diagnostics, therapy and maintaining patients. The urgency of a problem of children's and teenage suicides is defined by their remaining high frequency, tendency to serial and group suicides, prevalence of depressive frustration.

In our opinion, one of significant factors of growth of suicide activity among children and teenagers in modern conditions is the distorted formation of ideas of death which is connected with social, economic, technogenic changes in society.

Uncontrolled introduction into the life of teenagers the images of subculture foreign, nonconventional religious beliefs, sectarianism, availability of information about the ways of suicides, the description of experiences of mentally unhealthy people in the Internet, accompanied by promotion of the cult of death, unisex love, low-value of life noted recently lead to decrease in an anti-suicide barrier and deformation of moral ethical principles. The youth environment with the increased readiness “absorbs” the imposed postulates which are the pathological basis for development of autoaggressiveness, including suicide behavior.
On materials of posthumous forensic psychiatry evolutions we have analyzed 16 cases of suicides of teenagers (11 girls and 5 boys) at the age from 12 till 16 years made in 2011-2019 in Smolensk region.

All children were brought up in incomplete families. Financial positions of families were sufficient. Earlier nobody from these persons who committed a suicide asked for the psychiatric help. The suicide conflict lasted for almost 6 months (only some hours in one case) which, as a rule, had the interpersonal or mixed character. The analysis of teenager’s motives of suicides revealed out a tendency to their combination that complicated diagnostics of degree of expressiveness of suicide risk. Characteristic combinations of motives were the following: an avoiding appeal and a protest appeal, not typical for the teenager’s suicides, there were motives of refusal of life and motives of self-punishment. In the presuicide period in all studied cases verbal and nonverbal signs of accruing suicide intentions (donation of personally significant things, writing of farewell notes, drawings, messages in social networks, the “last” calls by the mobile phone) were noted. In 30% of cases suicides were made in alcoholic intoxication. All teenagers had affective frustration of easy and moderate degree the expressiveness allowing in sufficient volume to carry out the daily duties before a suicide. The lost girls tried to involve in the suicide act their girlfriends that refused to carry out the suicide plans in the last minute.

Studying the age features of formation of suicide behavior, the all-round analysis of suicides of teenagers and children is necessary for the development of organizational forms and methods of their prevention, the differentiated tactics of early prevention, for the correction of mental disorders, being accompanied by the development of suicide behavior, and also for the prevention of incorrect reflection of a subject of suicides in mass media and in the Internet.

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INTEGRATIVE GROUP PSYCHOTHERAPY FOR PANIC DISORDER IN THE STATIONARY

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Panic disorder is considered to affect from 2 to 6 percent of population at some point of their life. In many ways, the decreasing life standards often play a key role in diagnosing panic disorder. For instance, the unemployment rate among people with PD amounted to 25 per cent.

A comprehensive treatment of panic disorder involves not only an appropriate pharmacologic treatment but also a wide array of psychotherapy such as sessions of family, behavioral therapy and relaxation.

However, cognitive behavioral therapy (CBT) is considered to be the most essential option.

The Research purpose: To determine the efficiency of integrative group therapy in a comprehensive treatment of PD in the stationary with different variations signs and symptoms.

Summary:
- Integrative group therapy improved the efficiency of psychopharmacologic therapy in the stationary.
- Integrative group therapy accurately improved the efficiency of psychopharmacologic therapy, related to restructuring of catastrophic cognitive distortions and decreasing anxiety, measured by the Anxiety Control Questionnaire and the Anxiety Sensitivity Index.
- Integrative group therapy improved the efficiency in treating agoraphobia, measured by the Mobility Inventory.
- The patients, treated by Cognitive behavioral and, in addition, pharmacologic therapy, showed more stable effects in their anamnesis than the patients, treated by pharma only. Moreover, cognitive behavioral therapy minimized relapses of the first group after abolishing of medical treatment up 80% in comparison with 60% in the second group.