## 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 neuro-psychiatric 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.

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## 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 autoaggressivness, including suicide behavior.