PSYCHOLOGICAL PROFILES AND PSYCHOPATHOLOGICAL ASPECTS OF THE INFECTED PATIENTS WITH HCV

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The hepatitis C is a major burden of present days. The prevalence of hepatitis C worldwide affects up to 150 million people. The importance of the disease determined the World Health Organization to issue in April 2014 the “Guidelines for the screening, care and treatment of the hepatitis C”, representing key recommendations and considerations for implementations. An improvement of the care processes for C hepatitis virus infected patients is of great importance. Neurocognitive disorders in HCV infected patients do not always correlate with the harshness of the liver disease. Cognitive impairment at patients infected with HCV comes in a variety of of psychological and psychiatric conditions like depression, drugs abuse, generalized anxiety disorder, irritability, cognitive disorder, delirium, psychosis and suicidal thoughts. HCV chronic infection leads to a multifaceted systemic disease. Based on the research reviewed so far we found a strong evidence that the patients should be evaluated before beginning of the HCV treatment, and there is a good reason to deal with depression and the other psychiatric disorder before starting hepatitis C therapy.

Keywords: psychosomatics, depression, cognitive impairment, somatization, psychopathological traits.

INTRODUCTION

According to World Health Organization there are about 150 million people chronically infected with HCV and more than 350 000 people die each year from hepatitis C-related liver diseases. At the global level the burden of diseases due to acute hepatitis B, C and cirrhosis of liver, account for about 2.7% of all deaths. The WHO expects this percentage to increase in the future. The WHO Regional Office for Europe estimates that there are about 15 million people living with chronic hepatitis C in Europe. Together hepatitis C and Hepatitis B cause in Europe over 120 000 deaths per year.

In Europe co-infection of HCV and HIV is common, especially among people with drugs addiction. Due to the patients with addiction the treatment of hepatitis C involves also a psychiatric or psychological cure for addiction. It is very important to understand the psychological profile of the patient and to observe the development of the disease during treatment. The personality disorders pose a serious challenge in the treatment of the infectious diseases. According to the Commission for Infectious Diseases from the Romanian Ministry of Health on 2015 in Romania there were a number of patients infected with HCV was between 650 000 and 900 000.

The European Association for the Study of the Liver (EASL), in a study from 2013 show that the prevalence of the hepatitis C virus infection in the last decade in the European population were between 0.13 and 3.26%, the highest rates being found in Italy and Romania. The HCV - infected population will develop complications in the years to come, leading to a substantial increase in the burden of the disease. It is of great concern that 90% of the people in Europe infected by viral hepatitis are unaware of their status. This disease, with high mortality, presents according to AASLD (American Association for the Study of Liver Disease), two major hurdles that preclude it’s the complete treatment. The two hurdle side effects of the non-standard treatment (peg-interferon alpha combined with ribavirin) are: hematological and neuropsychiatric.

If in respect with the treatment of the hematological conditions progress has been made through the introduction of increasing factors that can stimulate the hemoglobin levels, the neuropsychiatric reactions are, as of today, the main cause of the abandonment of the treatment before completion.
and of the decision of non-accessing the treatment at all\(^8\).

The majority of the studies only make reference to the clinical body side of the antiviral treatment, with very little or no reference at all about patient or his family psychological condition that can pose serious problems to the infectionist physician or family physician problems that can lead to an undesirable clinical picture.

The detection of HCV genetic sequences in the brain tissue raises the possibility that the presence of HCV in the central nervous system may explain the reported neuropsychological symptoms and cognitive impairment\(^7\).

M. Schaefer reveals in a 2012 study that patients with higher levels of baseline symptoms have higher depression scores during IFN - alpha treatment, and hence are more likely to develop clinically significant depression\(^5\). The research also evidenced that a patient with a history of depression has represents an increased risk factor.

The patients with chronic infection that exhibit psychopathological comorbidty can display a psychopathological clinical decompensation that imposes a clinical – therapeutic reassessment:
- Readjustment of the basic therapeutic scheme;
- Psychiatric treatment, with the psychotherapetics cure if the case may be;
- Increase in social and medical expenditure\(^9\).

The psychodiagnostic is very important in revealing the etiological therapy of the infected patients and for the carry on the treatment by those patients.

**DISCUSSION**

The acknowledgement according to which the body and the psychic react as one, was made public 80 years ago, in 1935, at Tavistock clinic in London\(^10\). During a conference attended by over 200 physicians, the Swiss physician and later psychoanalyst Carl Gustav Jung, acknowledged and demonstrated for the first time the importance of the physiological phenomenon associated with emotions, known today as psychosomatic phenomenon.

Attestation of the psychological and psychiatric connotations in the clinical - therapeutic development of the chronic HCV infected patients can be found in many studies. Most of the hepatological trials focus however on depression as a single symptom, without using depression scales or diagnostic instruments, leading to an under reporting of the mild to moderate depressive episodes\(^11\).

According to „Hepatology – a clinical textbook”\(^12\), the following adverse psychiatric side effects can be noticed:

- Fatigue 40 - 80%
- Sleep disorder 20 - 45%
- Irritability 20 - 45%
- Cognitive disorder 20 - 30%
- Depressive episode 20 - 70%
- easy 40 - 70%
- medium 20 - 40%
- severe 5 - 20%
- Delirium, psychosis 1 - 3%
- Suicidal thoughts 3 - 10%

The rate of depression associated with interferon treatment varies vastly, most of the studies reporting percentages between 10 - 40%. Although history of major depression or suicide attempts is considered a contraindication for interferon based therapy, treatment of patients with preexisting psychiatric disorders can be initiated in close collaboration with an experienced psychiatrist in well controlled settings\(^13\). Sleep disturbance is an early symptom of depression and as previously mentioned can be found in a high percentage at the patients with HCV. The sedatives for sleep disorders often impair patients’ awareness and his ability to focus or concentrate the following day\(^14\).

This variability can be explained through methodological differences:

- In some studies “depression” was considered to be a regular symptom, while other studies included the patients that were diagnosed with DSM-IV for Affective Disorder induced by a substance (interferon) - with depressive elements or major depressive episode.
- The research of the secondary depression with interferon apparently follows the biblical saying “search and you will find”, due to the fact that the depression rate is high in the prospective studies and those that utilizes a specific scale for depression, compared to the retrospective studies or screening of the side effects in general.

The history of major depressive disorder can be a predictive factor only if before the beginning of the interferon treatment, the patient presents depressive symptoms. The mental status of the patient immediately before the beginning of the treatment with interferon is in fact the most important.

In a 2013 study of Daniel Keller\(^15\) depression affects up to 50% of patients with chronic hepatitis C virus infection receiving treatment with interferon, but it appears to be a self-limiting and does not require antidepressive therapy. The same study suggests that the prevalence of depression in peg IFN+RBV treatment starts at 24% at the baseline week (week 0), reaches a peak of 49.5% week 12 and that
decreases at 23.3% week 72 (24 weeks after therapy).
Some studies show that psychiatric comorbidity among the obsessive compulsive disorder, other anxiety disorders and somatization disorder are associated with dropout before the completion of twelve weeks of treatment\textsuperscript{16}. The studies reveal that treatment compliance and effectiveness in obsessive compulsive disorder can be optimized if the assigned treatment modality is tailored according to specific psychopathologic features. Somatization disorder has been shown to be a common and chronic disorder associated with generalized anxiety disorder, panic disorder, and agoraphobia. Somatization disorder has also been associated with premature antidepressant treatment discontinuation in patients with functional gastrointestinal disorders or depression. The somatization disorder and generalized anxiety disorder seems to increase the dropout rate associated with intolerable side effects. Somatization disorder seldom appears without the presence of an anxiety disorder in many studies. The frequency of treatment discontinuation due to side effects is reported to be low by the study. In addition to affecting noncompliance associated with anxiety disorders, somatization disorder may act as a marker of anxiety chronicity and severity. According to HEP Magazine\textsuperscript{17} more than one third of the people living with hepatitis C experience depression. The mechanism is not completely understood but the virus interferes with a number of chemicals in our brain which can lead to feelings of depression. People who undergo hepatitis C treatment and are cured often report that depression is gone. Studies show that suicidal symptoms are one of the most serious symptoms of depression according to „Hepatology – a clinical textbook“\textsuperscript{18}. When depression is overwhelming the patient may benefit from seeking help from a psychologist or a psychiatrist. The assistance of such professional can diminish suffering and increase the quality of life. The stress caused by HCV infection leads to an activation of the psychopathological traits in the psychological profile of the patient. Chronic HCV infection is associated with significant impairment of quality of life. 35 - 68% of HCV patients suffer from chronic fatigue, subclinical cognitive impairment and psychomotor deceleration. Symptoms of depression are present in 2 - 30% of the HCV patients\textsuperscript{19}. Most of the patients with HCV infections is asymptomatic or have only nonspecific symptoms as long as cirrhosis is not present\textsuperscript{20}. Manifestations are fatigue on most cases and less are myalgia, weakness nausea. Also the cognitive impairment is a major symptom. Hepatitis C seldom leads to disabilities. Avoidance of the psychosomatic comorbidity due to the evolving character with irreversible complication of the HCV infection can be achieved by interdisciplinary treatment of the infection and with development of a psychotherapeutically interference model aimed for individual self-progress and facilitation of the patient social – professional integration. Establishment of certain social-economical actions is required for the social integration of the patients for the purpose of improving their standard of leaving. An analysis of the dependencies between their existing environment (family, society, education, work place) and contamination with HCV is required. According to Nicole Cutler physicians are finding an increasing correlation with HCV infection and clinical depression. HCV is a major cause of chronic disease and affects an many people worldwide. For many living with HCV the standard therapy with peginterferon - alfa and ribavirin is not an option or it is unsuccessfully. Weather an HCV - infected person has not attempted standard therapy or is a non-responder; physicians are finding an increasing correlation with HCV infection and clinical depression. Due to depression’s prevalence among this population and its potential mechanisms both patients and physicians should take depression seriously. Based on the research reviewed so far we found a strong evidence that the patients should be evaluated before beginning of the HCV treatment, and there is a good reason to deal with depression and the other psychiatric disorder before starting hepatitis C therapy.

**CONCLUSIONS**

The final conclusion for the treatment with HCV virus is:
- multi-disciplinary treatment of the infection and,
- generation of a holistic psychosomatic picture of the patient infected with chronic HCV
Quantification of the general and specific psychometric deterioration of the chronic infected patients through psychometric tests before and after the outburst of the psychopathological comorbidity; Establishment of a new holistic picture of the psychosomatic profile of the HCV chronically infected patient. Patients that choose “to fight” increase their healing chances
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