Psychosocial Issues in Patients with Chronic Hepatitis B and C

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ABSTRACT: Psychosocial issues and the quality of life are important components at the patients diagnosed with chronic hepatitis B and C. In function of the severity of the infection with virus B or the patients who already have cirrhosis, the treatment and psychosocial education should be improved because they have bigger problems. The frequency of psychosocial disorders seems to be raised at the patients diagnosed with chronic hepatitis B. Factors as alcohol abuse and a low social support have a negatively impact above mental health of these patients. The prevalence rate of chronic hepatitis C infection at patients with severe mental illness can be nine times higher than in healthy population. Usually patients with chronic hepatitis B have a quality of life and a mental health better than patients with chronic hepatitis C. Patients with psychiatric affections (especially institutionalized people) have generally a higher risk of being infected with virus B in comparison with general population. Patients with chronic hepatitis B and C suggest a higher grade of stigmatization from society. Despite clinical challenges which treatment with interferon at patients with chronic hepatitis and comorbidities represents, recent studies indicate the fact that treatment can be administrated in safe conditions at patients with viral chronic hepatitis and psychiatric disorders.

KEYWORDS: chronic hepatitis B and C, depression, quality of life, stigma

Introduction

Chronic diseases are associated with several psychosocial problems including quality of life, depression, anxiety and other psychological disorders. In the cases in which life conditions in some chronic diseases stigmatize the patient, the psychological impairment becomes more and more pronounced. Chronic hepatitis C as one of the most commune causes of hepatic diseases is associated with a major psychosocial risk. The complications in the advanced stages of the hepatic diseases can be associated with a low level of the quality of life.

The primary care of the doctors and psychiatrists is to identify the patients with psychiatric diseases which are exposed to the risk of virus B and C infection and observe them [1,2]. Preexisting psychiatric disorders complicates the treatment of viral B and C chronic hepatitis, as the treatment of viral B and C chronic hepatitis can cause worst psychiatric disorders.

The quality of life in patients with chronic hepatitis B

Below of being a mental marker of patients, measuring the quality of life should be capable of catching the differences between stages of a specific disease (generic instruments allow for comparison between patients diagnosed with the target conditions and those without).

The criteria of monitoring the quality of life are: sleepiness, fatigue, emotional function, anxiety, depression, vulnerability, lack of appetite, abdominal and systemic symptoms, joint pain/discomfort, loneliness, sexual problems and disfunctions. Several studies showed the difference between the quality of life, which can differ in function of the severity of the disease, from asymptomatic to associated symptoms (usually in cirrhosis and hepatocellular carcinoma). The stages of the disease affects the quality of life in function of the stage of disease. Studies show that patients with chronic active hepatitis B have scores near compensated cirrhosis, but all have better scores than patients with cirrhosis and hepatocellular carcinoma. Post-transplant patients showed an improvement of quality of life compared with patients with decompensated cirrhosis and hepatocellular carcinoma.
### Table 1. Summary of most important studies about the quality of life at patients with chronic hepatitis B

| Name of the study       | Groups                                           | Principle results                                                                 | Comments                                           |
|-------------------------|--------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------|
| Levy et al/2008/US UK, Canada, Spain, China | 600 patients with HBV                            | Infected respondents had significantly lower score at quality of life than healthy subjects | Dates had been adjusted for age and sex            |
| Marcellin et al/2008 Multinational | 448 HBV and 791 HCV (both treated with α2 pegylat) | More drop was seen at the HCV patients than HBV patients regarding psychiatric components; there been no difference regarding mental components |                                                    |
| Svirtilh et al/2008     | 167 patients with virus C; 60 patients with virus B; 70 healthy patients | Low quality of life had been seen at chronic patients than healthy ones            | Age had a negative impact above quality of life    |
| Altindag et al/2009/ Turkey | 30 carrier; 30 active HBV; 30 healthy             | Low scores had been seen in all areas at patients with active HBV than healthy ones |                                                    |
| Dan et al/2008/USA      | 51 active HBV; 41 HCV; 33 fat liver; 15 with other hepatic disease | Patients with virus B had better scores than patients with virus C and fat liver    | Cirrhosis had a negative impact above quality of life |
| Tasbakan et al/2012 Turkey | 128 carrier; 28 HBV and norms population        | There had been no difference between carrier and HBV; score in all areas except vitality and physical function had been low at carrier in comparison with norms. | Education and physical function explain the majority of difference between carrier and HBV. |

Most of the dates compare those with chronic hepatitis B with people who have chronic hepatitis C, nonalcoholic fat liver. Scores had been higher at patients with chronic hepatitis B than patients with nonalcoholic fat liver. There been no differences between chronic hepatitis B and patients with chronic hepatitis C, although scores regarding the activity and questions about abdominal symptoms had been lower at patients with HCV than patients with HBV.

The majority of the studies show that the quality of life at patients with HBV is better than patients with other liver diseases [3]. Most of the researches show a low quality of life (especially regarding psychiatric symptoms) at patients with HCV compared to HBV.

### Chronic hepatitis B and C and psychiatric diseases

Studies involving psychological disorders in HBV patients are generally limited to anxiety and depression. Studies showed that psychiatric disorders (mostly depression), anxiety and a poor global functioning were more common in chronic inactive hepatitis than healthy subjects. There was a higher rate of psychiatric disorders at patients diagnosed with chronic hepatitis B within 3 months. One of the areas with the fewest studies regarding psychosocial issues of patients with HBV refers to children. Lai et all [4] in a study about children found high levels of depression, anxiety and emotional instability in sick patients than healthy subjects. Psychological disorders don’t affect only the child, but also have a negative impact above their parents.

Patients with severe psychiatric manifestations have generally a higher grade of poverty, fact that raises the risk of infection with HBV. The abuse of substances and high-risk behaviors are frequently associated with psychiatric manifestations [5]. HBV rate of prevalence among institutionalized patients with mentally handicap is 8% at more than 80% [6,7]. Stigma can significantly affect the patients lives causing a lower quality of life. Studies regarding stigma of HCV patients are one of the most deficient areas in the specialty literature. In a small study, 19 careers of HBV had been interviewed about their more important fears. While 60% of them expressed their worry of not infecting other people, 36% were worried of not being stigmatized.

Patients with chronic virus C had a higher prevalence of psychiatric disorders, as well those with antiviral treatment [8]. At least 50% of the patients infected with virus C suffer of a psychiatric disease and the prevalence during life of psychosis, anxiety, impairment of quality of life is significantly higher than healthy subjects [6,9-11]. The prevalence of virus C infection among hospitalized patients in psychiatric hospitals is of 18% [7]. For some patients with preexisting mental illness (psychosis, substance abuse, using and sharing same needles, intranasal drug abuse) certainly raise the risk of infection with virus C [12-15]. For some other patients (those with anxiety and...
those who have affective disorders) the distinction between cause and effect is less clear [16-18].

Despite the association between HCV and psychiatric diseases, the screening for HCV hasn’t been a routine in patients with mental illness. These patients have a risk to develop HCV through risky sexual behaviors and intranasal drug abuse. The worry for HCV patients is challenging while most of psychotropic drugs are metabolized in liver and associated with a raised hepatotoxicity.

Patients with HCV and psychiatric diseases wouldn’t answer as well as the difficulties to submit at the rigorous posttransplant regimen [16-18]. Despite the evidence that HCV infected and preexisting or actual psychiatric diseases can safely be treated with antiviral medication, these patients are continuously excluded from ribavirin and interferon therapy because of neuropsychic side effects. [19-21]

Neuropsychiatrical side effects of ribavirin and interferon therapy appear in a proportion that varies between 24 and 49% of patients [9,22]. Among them fatigue, depression, anxiety, hostility, manic symptoms, cognitive disorders, delirium, psychosis and suicidal ideation [20,23,24]. Among more common psychiatric side effects are depression (25,34%), irritability and insomnia. Suicidal ideations and suicidal act attempts appear at 2% of patients. Psychiatric side effects had been with systemic and gastrointestinal effects the most commune reason for giving up therapy.

There is a general question if a patients who has chronic hepatitis C and has a personal history of psychiatric diseases, but which at actual moment doesn’t have psychiatric symptoms is able to do the antiviral treatment without interruption and with minimal psychiatric side effects. [25, 26].

Given the adverse effects of antiviral therapy depression is estimated that approximately 30-35% of patients treated with interferon will develop depression. Most antidepressants are metabolized by the liver, which raises concerns regarding the potential hepatotoxicity [27]. However new antidepressiv approved desvenlafaxine could significantly improve risk due to metabolism in a very small proportion liver. Prophylactic antidepressant should be taken into account but well monitored side effects (nausea, vomiting, sexual dysfunction, paradoxical reactions) [25]. Other examples of antidepressants that includes Mirtazapine has a certainty that is associated with bone
decalcification and agranulocytosis, which would place patients treated with interferon in a high risk for infection.

Conclusions

Quality of life is significantly impaired in patients with chronic hepatitis B, particularly in those with severe disease. C virus infection is a liver disease most likely affect the CNS and is associated with increased proportion of neuropsychiatric disturbances. Pre-existing psychiatric imbalances HCV complicates treatment as HCV treatment can cause exacerbation of psychiatric disorders.

Prevention of disease progression or treatment of early stage liver transplantation can improve quality of life. Although some of antiviral drugs decrease the quality of life during treatment, it significantly improves after stopping it. Patients in psychiatric institutions have increased risk of infection with virus B and C. immunization, continuous monitoring, educating those with psychiatric disturbances and their families and decrease length of stay may be potential benefits in reducing infection rates.

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