

Hepatitis C and Depression

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Hepatitis C is one of the major health related problem being faced by Pakistan, with prevalence as high as 16% in certain localities.¹ It is estimated that more than 170 million people in world are infected by Hepatitis C Virus (HCV). This represents about 2.5% of world population from which about 32.3 million are in South East Asia.^{2,3} Due to unavailability of vaccine the world wide prevalence of HCV infection has not shown a downward trend as seen in hepatitis B. Although both share the same modes of spread, about 3-4 million new cases of HCV infection are reported each year.^{2,4} Depression is the third common adverse effect of HCV infection reported in 70% of HCV infected patients, preceded by physical fatigue (86%) and irritability (74%).⁵

The prevalence of depression is reported to be much higher in HCV infected patients (24-70%) as compared to general population (6-10%).⁵⁻⁷ A recently published systematic review of depression occurring during interferon therapy showed considerable variation in frequency and extent of interferon induced depression from 0% to 82% due to difference in criteria, treatment protocol and cutoff values.⁸ But this highlights the importance of recognition of this disorder while managing HCV infection. Not only do the interferon based therapies induce de-Novo depression but it also aggravates the scores of already existing depression.^{9,10} Majority of depressive symptoms occur in initial 3-months of therapy.¹¹ The risk factors for depression during interferon therapy have been identified as presence of depression before commencement of therapy, history of drug abuse, HIV co-infection, older age, organic brain impairment and genetic risk factors in serotonergic system.^{10, 12-14} Gender is not identified as a risk for interferon induced depression in contrast to general population where such a risk exists.

The early virological responses (EVR) were significantly lower in patients with depressive symptoms as compared to those without them.¹⁵ The use of antidepressive therapy in such patients significantly improves sustained virological response (SVR).¹⁶ Before initiating treatment for HCV infection, all patients should be screened for evidence of active depression by direct questioning and/or standardized tools such as the CES-D screen questionnaire.¹⁷ Because of the increased risk of poor treatment outcomes, active depression should be treated before therapy for HCV infection is initiated. Citalopram, escitalopram and paroxetine have shown 78-88% improvement in depressive symptoms in HCV infected patients.¹⁸⁻²⁰ The

antidepressants should be initiated at lower doses to increase adherence to therapy and reduce side effects. While the antidepressant effect usually takes 8-14 days to appear, the side effects usually appear in initial 8 days.²¹ It is therefore pertinent to identify and treat depression early in patients of HCV infection as the patient can progress to severe depression even during the therapeutically effective window period after initiation of therapy. SSRI are effective in treating depression in HCV infected patients and can be safely given in patients without cirrhosis and thrombocytopenia but they do increase the risk of bleeding in HCV infected patients.^{19, 22, 23} Antidepressants once started should be continued throughout the treatment and for 6 months after treatment cessation.

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