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a series of articles
written by medical
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the management
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Hepatitis C

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Hepatitis C and Fatigue

Many individuals with chronic hepatitis C virus (HCV) remain symptom free for the majority of their lives. Generally, HCV can remain asymptomatic for a decade or longer. However, chronic fatigue is among the most common presenting symptoms. Fatigue has been reported in up to 67% of individuals¹ with chronic HCV and is the most frequent extrahepatic manifestation in those infected with HCV.² It has been suggested that one's awareness of positive HCV status alone increases the experience of fatigue and depression.³ This necessitates that a distinction be made between the psychological effects of the individual's knowledge of being infected with HCV, and the effects of the virus itself.

Recent research has suggested that fatigue is more likely related to the psychological manifestations rather than to the physiological effects of HCV.⁴⁻⁶ For example, in a study by McDonald, et al.,⁶ fatigue weakly correlated with the level of fibrosis on the liver biopsy, but strongly correlated with all the psychological domains of depression, anxiety, somatization, interpersonal sensitivity, and hostility. One Japanese study found that individuals with HCV had no

characteristic physical symptoms of chronic illness when compared to controls, but found significant differences in subjective ratings of aggression.⁵

Compared to controls, Obhrai et al.⁷ found that fatigue and general psychiatric disturbances were more prevalent in not only HCV-infected individuals, but also in individuals with alcoholic liver disease, mixed liver disease, and chronic non-liver diseases. In a prospective study of over 1600 individuals with HCV, the prevalence of fatigue and clinical and biological hepatic and extrahepatic markers of fatigue were examined.² Fatigue was found to be present in 53% of patients during their first visit. Seventeen percent evaluated their fatigue as severe or impairing. Factors that were associated with fatigue included female gender, older age, presence of cirrhosis, depression, and purpura (small hemorrhages). No significant associations were found between fatigue and viral load, genotype, alcohol consumption, or abnormal thyroid function.

Interferon (IFN) therapy and Fatigue

Fatigue also manifests as a predominant symptom of IFN therapy and is noted to be present in 70-100% of patients

treated with IFN.⁸ If present prior to therapy, fatigue may be exacerbated within the first six months.⁹ Increases in severity of fatigue influence health related quality of life and have significantly predicted IFN therapy discontinuation in HCV patients.¹⁰ If not managed effectively, fatigue may prevent HCV patients from completing a potentially life saving therapy. It is important to assess the patient who has fatigue for the presence of IFN-induced major depression, as fatigue is a common symptom of the depressive syndrome.

Managing Symptoms of Fatigue

The preponderance of chronic fatigue in individuals with HCV indicates a need for treatment management strategies. However, clinical management of fatigue in individuals with HCV can be complicated by several factors. There is little evidence as to the physiological mechanisms of fatigue in the HCV population. Clinicians must often rely on the patient's subjective report to determine the severity of fatigue.

Research indicates that antidepressants may be useful in reducing fatigue,¹¹ especially as it manifests with depression. However, additional research is needed to determine whether

improvement in depressive symptoms leads to lessening of fatigue for patients with HCV.⁴ Methylphenidate has been used to treat the side effects of cancer IFN-related fatigue, although it has not been established as a treatment for HCV-related fatigue. Also, as the prevalence

patients undergoing herbal treatment and receiving acupuncture, 4 of 17 patients reported complete relief from symptoms of fatigue and 13 of 17 reported at least partial improvement.¹²

Prior to choosing interventions for management of HCV-

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of co-morbid substance use disorders, particularly stimulant, methamphetamine and cocaine use, is so high in patients with HCV, giving these patients methylphenidate may exacerbate underlying substance use disorders. Pharmacologic interventions are also useful in managing symptoms of IFN-mediated fatigue.⁸

Other non-pharmacological strategies that have been proposed for IFN-mediated fatigue include: bedtime administration of IFN, reduction of IFN dose, improving nutritional intake, replacing fluids and electrolytes, alternating periods of rest and activity, aerobic exercise, and scheduling strenuous activities during peak times of energy.⁸

Research regarding the usefulness of traditional Chinese medicine in relieving symptoms of HCV is limited. Traditional Chinese medicine may include any of the following five disciplines: acupuncture, diet, herbs, massage, and Qi Gong (a movement technique to balance energy in the body). In a preliminary report of 24 HCV

related fatigue, co-morbid conditions should be addressed. Such conditions may include: thyroid disease, anemia, nutritional deficiencies, and depression.¹³ Other factors that should not be overlooked are concurrent medications, excessive use of caffeine or alcohol, lack of exercise, and sleep disturbances. ■

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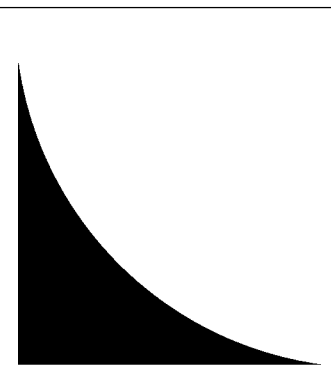
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