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LETTERS TO THE EDITORS

Serotonin-norepinephrine reuptake inhibitor desvenlafaxine for the treatment of interferon alfa-associated depression in patients with hepatitis C

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Chronic infection with the hepatitis C virus (HCV) is a worldwide health problem.[1] The mainstay of treatment includes the use of pegylated interferon-α (peginterferon alfa). Interferon (IFN) therapy is frequently associated with psychiatric adverse events, such as depressive disorders, which occur in approximately 30% of patients.[2] Selective serotonin reuptake inhibitors (SSRI) are the first-line treatment of choice for IFN-associated depression.[3] However, nonresponse or poor response is common.[4] Antidepressants with broader mechanisms of action, such as the serotonin and norepinephrine reuptake inhibitors (SNRI), could theoretically increase remission rates. One such agent, desvenlafaxine, presents a favorable pharmacokinetic profile and its hepatic metabolism consists essentially of glucuronidation.[5] Herein, we report two patients with hepatitis C who developed depression while receiving standard doses of IFN and were treated with desvenlafaxine. There is no previous report of desvenlafaxine use for this specific indication.

A 45-year-old man with genotype 1 HCV infection, elevated alanine aminotransferase (337 IU/L), and a METAVIR score of A2F3 (denoting moderate inflammatory activity and advanced fibrosis without cirrhosis) developed depressive symptoms, with Beck Depression Inventory (BDI) and Hamilton Depression Rating Scale (HAM-D) scores of 15 and 10 respectively. He was prescribed citalopram at a dosage scaled up to 40 mg/day. Four weeks later, IFN was initiated. After 8 weeks of IFN treatment (week 12 of citalopram), depression worsened, as demonstrated by a severely depressed mood, apathy, hopelessness, suicidal ideation, fatigue, and muscle pain. His BDI and HAM-D scores were 45 and 21 respectively. Citalopram was switched to desvenlafaxine and the dose was titrated up to 100 mg/day. A clinically significant reduction of depressive symptoms was achieved after 8 weeks (week 16 of IFN treatment), with a BDI score of 10 and HAM-D of eight.

A 49-year-old man with genotype 1 HCV infection, elevated alanine aminotransferase (123 IU/L), and METAVIR score of A2F2 (denoting moderate inflammatory activity and moderate fibrosis) presented with a complaint of emotional instability, insomnia, loss of appetite, fatigue, sexual dysfunction, muscle and joint pain, and irritability after 16 weeks of IFN treatment. By the 25th week of antiviral treatment, he had developed full-blown major depression. The BDI score increased from four at baseline to 26 at this time point, and the HAM-D score increased from three to 23.

Desvenlafaxine was started, with the dose titrated up to 100 mg/day. The patient reported partial improvement of insomnia and irritability, but did not achieve remission of symptoms even after 8 weeks of desvenlafaxine (week 33 of IFN treatment). His BDI and HAM-D scores decreased during this period, from 26 to 19 points and 23 to 14 points respectively. Full remission of depressive symptoms occurred only after the end of IFN treatment.

Both patients tolerated desvenlafaxine well, with no increase in liver enzymes. The first patient experienced a clinically significant reduction of depressive symptoms with desvenlafaxine after failing to respond to citalopram. The second patient had only minor improvement of symptoms with desvenlafaxine.

Full remission of IFN-associated depression in HCV patients is a clinical challenge. Antidepressants such as the SNRI desvenlafaxine can be regarded as an option to improve its management. Controlled clinical trials are warranted.

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Disclosure

The authors report no conflicts of interest.

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