Monitoring people undergoing therapy for hepatitis C virus (HCV) infection for depression, and taking steps to manage this common side effect of pegylated interferon-based treatment, is an essential component of care, according to a new review article published by the International Journal of Interferon, Cytokine and Mediator Research.

Though the treatment of HCV infection is on course to change considerably during the next few years, pegylated interferon and ribavirin remain important components of all therapeutic regimens for the disease.

One of the well-established side effects of interferon is depressive mood of variable severity, including suicidal [thoughts], which often leads to discontinuation of therapy, Haris Papafragkakis, MD, of the University of Miami Miller School of Medicine and his colleagues explain. The prevalence of depression among people living with HCV receiving interferon, they add, has been reported to be between 10 percent and 40 percent, depending on the screening method used.

Patients who have a personal or family history of a serious mood disorder, depression, suicidal thoughts or suicide attempts “should be carefully interviewed and referred to a specialist for assessment of suicide risk and treatment of the underlying disorder before treatment with interferon can be considered,” the authors write.

Selective serotonin reuptake inhibitors (SSRIs) have been shown to be effective in treating depression in people living with HCV undergoing interferon therapy.

In one study highlighted by the authors, among 15 patients treated with Celexa (citalopram), 87 percent responded well to the medication with no change in liver function tests when varying doses of the drug were used. And in a more recent controlled clinical trial, the authors add, “Celexa was shown to be an excellent treatment option for patients who developed depression during treatment with interferon for HCV, compared to placebo.”

The related serotonin–norepinephrine reuptake inhibitor (SNRI) class of antidepressants, such as Savella (milnacipran), has also been shown to reduce depressive symptoms in patients taking
As for using SSRIs to prevent the development of depression, the authors say the effectiveness of prophylactic antidepressants has been questioned. They explain that data from clinical trials have been mixed, though one study of Paxil (paroxetine) demonstrated that when the drug was started two weeks before treatment with interferon, the severity of depression was reduced compared with those who took placebo.

“The fact that SSRIs sometimes are not efficacious, especially in a prophylactic role, can probably be explained by the fact that interferon not only increases serotonin re-uptake but also decreases serotonin synthesis,” the authors explain.

Based on these and other available data, Papafragkakis and his colleagues include a proposed algorithm for the management of people living with HCV with depression either before or during interferon treatment (see page 31 of the full article linked above).

Specifically, the authors recommend psychiatric evaluations for all people living with HIV and a history of depression, before starting interferon therapy. They also say that preventive therapy with an SSRI, started two to three weeks before interferon therapy is initiated, should be considered.

All HCV patients, including those with no history of depression, should have their thyroid stimulating hormone (TSH) levels checked before starting interferon treatment. “It is important to acknowledge the effect of interferon on the thyroid and the potential development of depressive-like symptoms related to thyroid dysfunction, mimicking, or even masking depressive symptoms related to interferon use,” the authors note.

If mild depression occurs during interferon treatment, a small dose of an SSRI—along with continued monitoring and SSRI dose increases, if needed—is suggested. If moderate depression develops, a moderate dose of an SSRI, along with the possibility of a psychiatric evaluation and discontinuing HCV treatment, are listed as options.

In those with severe depression or suicidal thoughts, Papafragkakis and his colleagues suggest stopping HCV treatment, seeking a psychiatric evaluation and considering hospitalization.

“Overall,” Papafragkakis and his colleagues conclude, “more studies are needed to establish the role of SSRIs and SNRIs in the prevention and treatment of depression and their effectiveness in compliance and [viral cure] rates. Psychiatric evaluation is mandatory when suicidal ideation becomes evident, and treatment should be discontinued in such cases. Finally, neuropsychiatric symptoms can be exacerbated by the adverse effect of IFN therapy on the thyroid. Monitoring of thyroid function should be performed in all patients prior to therapy and ideally every two to three months during interferon treatment.”