



# Mind Boggling

## *The psychiatric side effects of hepatitis C treatment*

It is estimated that 170 million people worldwide are infected with hepatitis C, but the disease is treatable for many patients. Pegylated interferon and ribavirin are the current mainstays of treatment for hepatitis C and may be highly effective in patients with particular genotypes. However, the psychiatric side effects of these medications are significant and are a frequent cause of early treatment discontinuation. Anticipating and recognizing these common side effects are often the first steps toward managing these issues.

### **Depression**

Significant depressive symptoms occur in 21 percent to 58 percent of patients on interferon and may include sadness, tearfulness, loss of interest or motivation, decreased energy, decreased appetite, hopelessness, or suicidal thoughts. These symptoms most often develop in the first 12 weeks of interferon therapy. There is significant debate about whether prophylactic antidepressant medication is indicated. Research has not conclusively determined whether patients with a history of a mood disorder are more at risk for psychiatric side effects of hepatitis C treatment. However, the current recommendation is that patients who have current symptoms of depression or anxiety start prophylactic antidepressant therapy prior to treatment for hepatitis C. In timing the start of interferon treatment, it is important to keep in mind that the effect of an antidepressant may not be noticed for several weeks. Safe antidepressant medications are

available and may even be used in the context of cirrhosis.

Depressive symptoms can be managed with medication, psychotherapy, adequate nutrition, rest and social support. However, these symptoms become particularly worrisome when accompanied by suicidal thoughts. Patients may become preoccupied with a sense of hopelessness or thoughts that their family members would be better off if they were dead. It becomes a medical emergency when patients begin to think about how and when they may attempt to end their life. At this time, immediate medical attention is required. Interferon should be discontinued if a patient is acutely suicidal. Risk factors for suicide include male gender, recent losses (job loss, divorce or death), impulsivity, substance use and history of previous suicide attempts.

have experienced treatment for hepatitis C, as these people often are excellent sources of support. Ongoing substance use often accelerates HCV-induced liver disease and decreases the likelihood of viral clearance with interferon treatment. It is essential to be open and honest with your treatment team about substance use as this may play a role in determining the optimal timing of treatment.

Twelve-step programs can be valuable sources of social support and play a critical role in relapse prevention. Actual relapse to substance abuse involves more than drinking or using drugs. Most people who have relapsed can recognize thoughts or actions that occurred prior to the substance use. It is important to recognize warning signs early and have a strategy in mind for how to seek help. In my practice, I

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### **Substance abuse**

Patients with active substance abuse issues are particularly vulnerable to relapse during treatment for hepatitis C. Substance abuse often involves an attempt to self-medicate mood and anxiety symptoms, which can be particularly problematic during this treatment. A patient of mine recommended that patients seek out other group members at Alcoholics Anonymous who

often recommend patients have an index card with them at all times that lists the phone numbers of people to contact and activities to try when the urge to drink or use drugs occurs. Prior to beginning treatment for hepatitis C, it is important to remove drugs and alcohol from the home as these may be tempting to use to treat interferon-related side effects. Enlist clean and sober friends and family for support.

### When it isn't depression

I often see patients who have some degree of sadness or frustration during interferon treatment. However, they may have experienced a worsening of symptoms with antidepressants. Often, patients experience irritability, decreased need for sleep, impulsivity, excessive risk taking, racing thoughts and paranoia. These symptoms may represent mania. In the event these symptoms occur, it is essential to speak to your doctor about referral to a psychiatrist who specializes in the treatment of patients with liver disease. It is usually necessary to stop any antidepressant medications. Patients with mania resulting from hepatitis C treatment are best treated with mood-stabilizing drugs. However, not all mood stabilizers are safe in liver disease. Psychotic symptoms such as paranoia or hallucinations are less frequent side effects, but they are almost always an indication for discontinuing treatment.

### Fatigue

Fatigue is one of the most common side effects of interferon treatment. Fatigue usually occurs within the first several weeks of treatment and often reaches its maximum intensity between weeks four and eight. Behavioral strategies are an important element in managing this problematic symptom. I often recommend that patients structure their work week to accommodate the days fatigue is likely to be worse. For example, if Fridays are the most difficult days, I recommend scheduling important meetings earlier in the week. I recommend scheduling individual work days in this way as well. Tasks that are more physically demanding often are best completed earlier in the day. Paperwork or other projects that require less physical energy can be

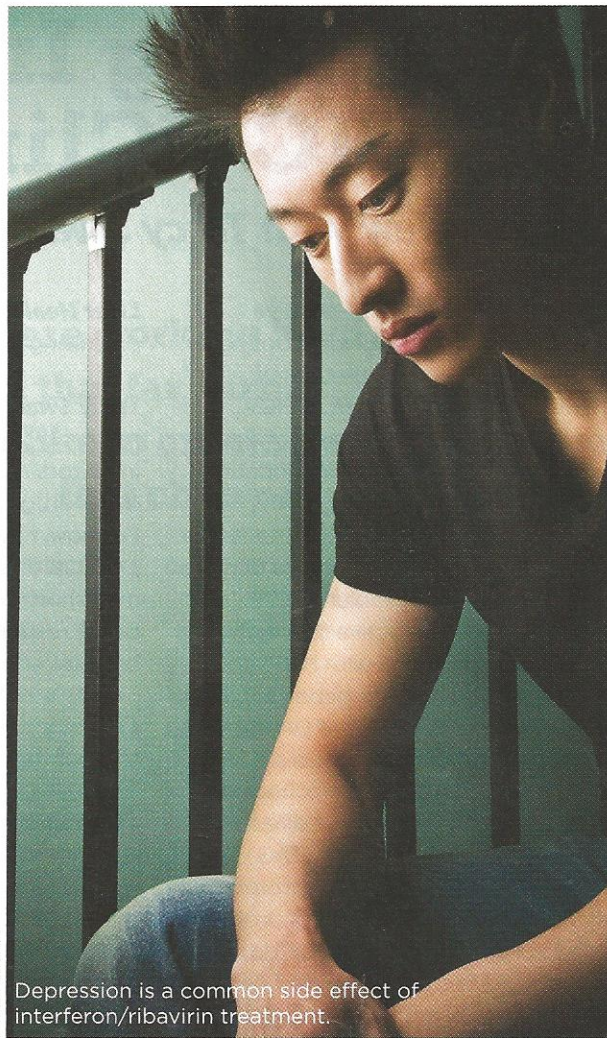
accomplished later in the day.

The importance of light exercise, as well as adequate nutrition and hydration, cannot be overstated. For severe fatigue, wake-promoting medications such as modafinil (Provigil) may be helpful. Activating antidepressants such as bupropion (Wellbutrin) may also be appropriate options. Of note, bupropion can also help to treat nicotine dependence. It is important to determine whether fatigue is a symptom of depressive syndrome. Interferon-related complications such as hypothyroidism and anemia will also worsen fatigue.

### Insomnia

Insomnia is a frequent side effect of hepatitis C treatment, with 30 percent to 40 percent of patients on interferon reporting this symptom. As I discussed in an earlier issue of *Liver Health Today* (July-September 2008), sleep hygiene is essential. Although it may be tempting to manage fatigue by napping during the day, this may disrupt the nighttime sleep schedule. Avoid caffeine later in the day. Keep your bedroom cool and dark, and avoid watching television in bed. Although television may feel relaxing, it is often activating to your brain and may keep you awake.

Pegylated interferon with ribavirin is currently the most effective therapy for hepatitis C infection.



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Depression is a common side effect of interferon/ribavirin treatment.

Unfortunately, these medications have many psychiatric side effects. The good news is that these side effects will resolve over time once interferon and ribavirin treatments are completed. For many patients, education and support from friends, family, treatment team or support groups can be invaluable tools to accompany them through this difficult treatment. **LHT**

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