

# HEPATITIS C CONDITIONS OUTSIDE OF THE LIVER:

## Fatigue, Depression, and Chronic Pain

### *Hepatitis C: It's About More than Liver Disease*

Chronic infection with the hepatitis C virus (HCV) can have health effects outside the liver. This fact sheet highlights three of the most commonly reported conditions associated with HCV that impact the body beyond the liver—fatigue, depression, and chronic pain. These conditions can significantly impact a patient's overall quality of life, but early HCV treatment can help minimize their effects.

## FATIGUE



### What is it?

Fatigue is a state of feeling tired or exhausted.

Although everybody feels tired from time to time, some individuals experience ongoing or long-term fatigue. Fatigue can be a direct result of HCV infection, or it may be related to other existing health conditions. Sometimes, fatigue is a side effect of medication.

### How common is it?

**50-80%**

of HCV patients experience fatigue.<sup>1</sup>

It is the most common symptom reported among individuals with HCV.



### Symptoms

Fatigue affects people in different ways. Some common symptoms include:

- Lack of energy
- Feeling sleepy
- Inability to concentrate
- Changes in sleep patterns
- Feeling worn out or run down
- Loss of motivation



### Diagnosis

A diagnosis of fatigue is based on the symptoms reported by patients. Healthcare providers may ask a series of questions to understand the frequency, duration, and types of fatigue symptoms.

There is no routine test to detect fatigue. However, diagnostic tests may be performed to rule out other health conditions that can also cause fatigue.



### Complications

HCV patients with fatigue may have a lower quality of life because they cannot enjoy the same activities they used to do. This can lead to depression and anxiety disorders.

It is important for patients to talk to their providers about healthy ways to manage fatigue in order to minimize its impacts on overall health.



### Treatment\*

- HCV treatment helps to decrease feelings of fatigue.<sup>2,3</sup>
- Lifestyle factors such as a healthy diet, taking steps to reduce stress, improving sleep quality, and incorporating regular breaks throughout the day can also reduce symptoms of fatigue.

*\* All treatment should be done in consultation with a licensed healthcare provider.*

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## DEPRESSION



### What is it?

Depression is a mental health condition that leads to frequent feelings of sadness that last for two weeks or longer.

Depression may be a direct result of HCV in the body, but it can also be related to:

- The stress of finding out you have hepatitis C
- Experiencing a stressful life event or trauma
- Side effects of certain medications
- Other health conditions that can cause depressive symptoms



Source: NIMH, NIH



### How common is it?

More than

**25%**

of HCV patients experience depression.<sup>4</sup>



### Symptoms

Some symptoms of depression may include:

- Feelings of sadness, emptiness, guilt, or worthlessness
- Loss of interest in usual hobbies or activities
- Changes in appetite
- Trouble sleeping
- Feeling hopeless or pessimistic
- Low energy
- Difficulty concentrating
- Thoughts of suicide



### Diagnosis

Healthcare providers often diagnose depression based on its symptoms. You may be asked to answer a series of questions about your mood, energy level, sleep patterns, appetite, and other factors that might indicate depression.

Your provider may also perform laboratory tests to rule out other medical conditions that can cause depression.

It is also important to let your provider know if you have experienced depression in the past.



### Complications

Severe depression can lead to thoughts or actions to harm oneself or others. This includes thinking about or attempting suicide.

If you or a loved one has thoughts of suicide, it is important to seek help as soon as possible.

For immediate support and linkage to local services, call the National Suicide Prevention Lifeline (1-800-273-8255).



### Treatment\*

- Depression is treated with medications called antidepressants. Patients may also benefit from mental health counseling.
- Patients may find that their depression goes away after successful treatment of their HCV infection. Patients experiencing depression should talk to their providers about whether HCV treatment is right for them.<sup>5</sup>

*\* All treatment should be done in consultation with a licensed healthcare provider.*

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## CHRONIC PAIN



### What is it?

Chronic pain is a long-term condition that occurs when an individual experiences pain or discomfort for several weeks or months.

The most common types of chronic pain affecting HCV patients include joint pain and muscle aches.

There are several possible causes of chronic pain associated with HCV such as the presence of the hepatitis C virus in joint and muscle tissues, abnormal responses of the immune system, or having other health conditions that contribute to pain.

### How common is it?

**50-70%**

of HCV patients experience chronic pain.<sup>6,7</sup>

In general, chronic pain affects over 25 million adults living in the U.S.<sup>8</sup> However, individuals with HCV are more likely to have chronic pain.<sup>9</sup>

Chronic pain is more likely to occur among HCV patients with other health conditions such as depression, certain blood disorders, fibromyalgia, and autoimmune disease.

### Symptoms

- Pain and/or stiffness in the hands, wrists, knees, or ankles (This pain usually affects both sides of the body.)
- Muscle aches in the back and neck

### Complications

Chronic pain can limit an individual's physical ability to complete everyday activities, including work-related tasks. Individuals who experience severe pain may also suffer from depression due to their reduced quality of life.

### Diagnosis

Chronic pain can be caused by many different conditions. Therefore, it is important to determine if pain is related to HCV infection or some other cause.

A physical exam, x-rays, and blood tests may be conducted to determine the specific cause of pain and to rule out other pain-related conditions.

### Treatment\*

- Minor aches and pains can often be treated with over-the-counter pain medications, but monitoring for side effects is important to ensure that these drugs do not harm the liver.
- If pain is related to other medical conditions, prescription medications may be necessary.<sup>10</sup>
- Finally, HCV treatment may also relieve chronic pain in HCV patients.<sup>2</sup>

\* All treatment should be done in consultation with a licensed healthcare provider.

1 Golabi P, et al. "Patient-reported outcomes and fatigue in patients with chronic hepatitis C infection." *Clin in Liver Dis*, vol. 21, 2017, pp. 565-78.  
2 Younossi ZM, et al. "An in-depth analysis of patient-reported outcomes in patients with chronic hepatitis C treated with different anti-viral regimens." *Am J Gastroenterol*, vol. 111, 2017, pp. 808-16.  
3 Sarkar S, et al. "Fatigue before, during and after antiviral therapy of chronic hepatitis C: results from the Virahep-C study." *J Hepatol*, vol. 57, no. 5, 2012, pp. 946-52.  
4 Younossi ZM, et al. "Extrahepatic manifestations of hepatitis C: A meta-analysis of prevalence, quality of life, and economic burden." *Gastroenterology*, vol. 150, no. 6, 2016, pp. 1599-1608.  
5 Adinolfi LE, et al. "Chronic hepatitis C virus infection and depression." *Clin in Liver Dis*, v. 21, 2017, pp. 517-34  
6 Ogdie A, et al. "Prevalence and risk factors for patient-reported joint pain among patients with HIV/Hepatitis C coinfection, Hepatitis C mono-infection, and HIV mono-infection." *BMC Musculoskeletal Disord*, vol. 16:93,  
7 Barkhuizen A, et al. "Musculoskeletal pain and fatigue are associated with chronic hepatitis C." *Am J Gastroentero*. vol. 94, no.5, 1999. pp. 1355-60. 2015, pp. 1-8.  
8 Nahin RL, "Estimates of pain prevalence and severity in adults: United States, 2012." *J Pain*. vol. 16, no.8, 2015, pp. 769-80.  
9 Morasco B, "Chronic pain and substance use in patients with hepatitis C." *Ann Gen Psychiatry*, vol. 9, S1, 2010, S81.  
10 Kemmer, Nyingi M. and Kenneth E. Sherman. "Hepatitis C-related arthropathy: diagnostic and treatment considerations." *J of Musculoskeletal Med*. vol. 27, no.9, 2010, pp. 351-4.55