Hepatitis C or no hepatitis C, everyone experiences pain from time to time. However, if you have chronic hepatitis C virus (HCV) infection, you are likely to have pain. The Institute of Medicine (IOM) estimates that around 100 million Americans have pain. Compare this to the 3 million Americans living with HCV, how do you know if HCV or something else is causing your pain? This two-part series will explore hepatitis C and pain.

Hepatitis C is called the “silent killer,” because the liver is a non-complaining organ. Liver cells don’t have nerves, so there can be serious tissue damage, but no pain. However, lack of nerve cells doesn’t mean there can’t be liver pain (hepatalgia or hepatodynia). Located in the right upper part of the abdomen, hepatalgia is usually caused by stretching of the capsule surrounding the liver, as well as by complaints from nearby organs. Liver pain does not mean that hepatitis C is worsening. The discomfort may be dull, sharp, mild, severe, constant or intermittent. For me it felt like my liver was fluttering. The only way I can describe it was it felt like when I was pregnant and the baby moved.

Even if there isn’t discomfort in the area of the liver, HCV may cause pain in other parts of the body. These are known as extrahepatic manifestations, and the complaints most associated with
pain other than hepatalgia are:

- Musculoskeletal (myalgia)
- Joint pain (arthritis)
- Stomach pain

Since pain is a common symptom of many medical conditions, the first order of business is to get a medical diagnosis to determine the cause of your discomfort. Is HCV the cause, or is there something else? It doesn’t have to be either/or, as some people have more than one cause of pain. If HCV is the cause, the next order of business is to find out if the pain is a direct result of the virus, or has HCV caused a secondary problem, such as cryoglobulinemia or an autoimmune disorder.

In the case of cryoglobulinemia, hepatitis C causes the body to produce proteins called cryoglobulins. Cryoglobulins clump together in the blood when they are cold; this causes joint pain. Various studies have shown that successful HCV treatment also improves cryoglobulinemia. The American Association for the Study of Liver Diseases (AASLD) and the Infectious Diseases Society of America (IDSA) HCV Guidelines highly recommend HCV treatment for people with cryoglobulinemia.

Treatment may also help HCV-positive people with autoimmune disorders such as lupus and rheumatoid arthritis. If the pain is primarily from HCV, then eradicating the virus usually eliminates the aches and pains that are caused by the virus.

### Pain Medication

Acute pain, meaning that it is short-lived, is the easiest to manage. There is a wide selection of pain medications or analgesics, ranging from over-the-counter (OTC) aspirin to prescription narcotics. These drugs generally work well for acute pain because patients don’t take them for long periods of time, since the problem that caused the pain usually heals.

That is not to say that there aren’t risks and downsides to taking painkillers—there are, especially from a liver standpoint. This risk increases if the liver is severely damaged by HCV. However, if someone with hepatitis C has a well-functioning liver, most physicians are comfortable prescribing a short-course of narcotics for conditions that warrant it, such as injuries or surgery. The risk to the liver is low, and it’s inhumane and medically unwise to withhold pain relief.

A much bigger problem is chronic pain, or pain that lasts for more than three months (some experts say six months). Chronic pain affects body, mind, and spirit, and it can change your life. The more severe the pain, the greater the transformation. Not the good transformation, like from a caterpillar to a butterfly; more like from a butterfly to an ogre.

People with hepatitis C who are in pain, are confronted with the issue of finding pain relief that doesn’t further damage the liver. Fortunately, there is a wide selection of medications and pain...
management tools. Let’s explore pain medication this month; next month I’ll delve into medication-free pain management.

**Nonsteroidal Anti-inflammatory Drugs (NSAIDs)**

*Acetaminophen (Tylenol)* is one of the most commonly used non-prescription analgesics. Known as paracetamol in Europe, acetaminophen is great for headaches, fever and mild pain. Technically, acetaminophen is an NSAID, but it’s anti-inflammatory effects are not as good as drugs such as ibuprofen.

Acetaminophen is one of the safest drugs there is, even if you have liver disease. It is harmless at low doses. However, acetaminophen can cause acute liver injury and death from acute liver failure at amounts just twice the maximum recommended dose of acetaminophen. The big problem with acetaminophen is that it is added to many medications. Remedies for colds, headaches, pain, sleep, sinus problems, cough and PMS often contain acetaminophen. Lose track of this fact, and you may take toxic amounts. For more information, read Acetaminophen: Safe or Harmless? ([HCV Advocate, February 2014](https://www.hcvadvocate.org/2014/02/acetaminophen-safe-or-harmless/)).

In the U.S., approximately 50 million people take acetaminophen every week, and more than 25 billion doses are sold yearly. Slightly more than 300 people die annually from it. Nearly all of these are from overdose; half are from intentional overdose (suicide attempts). Acetaminophen hepatotoxicity most commonly arises after a suicide attempt using more than 7.5 grams, but more often at more than 15 grams as a single overdose.

*Aspirin* is perhaps the most commonly used analgesic and fever-reducing medication in the world. At low daily doses (81 mg), aspirin is used to decrease the risk of stroke, and may prevent a second heart attack. Daily aspirin is no longer recommended to prevent heart disease unless there is a pre-existing condition.

At high doses, aspirin can injure the liver. However, this damage is not from toxicity, such as what may occur with high doses of acetaminophen. The biggest risk with aspirin is a gastrointestinal (GI) bleed. Far more people are injured every year from aspirin use than from acetaminophen. Mortality and morbidity studies are scant, but it appears that there are 10 times more deaths and hospitalizations from NSAID use than from acetaminophen. Complications may occur even at low doses, and the risk increases with age.

Rounding out OTC NSAIDs are drugs such as ibuprofen (Advil, Motrin) and naproxen (Alleve). These drugs are used for mild-to-moderate pain and inflammation. Around 30 million Americans take NSAIDs every year. These drugs rarely cause liver problems, but have other risks, such as injury to the kidneys and GI tract. In addition to OTC NSAIDs, there are many prescription NSAIDs.

**Opioids**

Opioids are medications related in structure to the natural plant alkaloids found in opium. There are natural and synthetic opioids, and many medications in this category. The most commonly prescribed opioids for pain are codeine, hydrocodone (Vicodin), and oxycodone (Oxycontin). Unlike...
NSAIDs, opioids have a high potential for dependency and abuse.

According to the CDC, more than 16,000 people in the United States die every year from overdose of prescription painkillers. This is approximately 44 people every day. On their own, opioids rarely injury the liver. However, opioids are sometimes formulated with acetaminophen, and excessive amounts can injure the liver. The FDA has recommended that physicians not use opioid combinations in which the dose of acetaminophen is greater than 325 mg per dose.

Opioid use is making the news these days. Hepatitis C infections rates are increasing at alarming rates in young people, most notably in Kentucky, Tennessee, Virginia and West Virginia. (Indiana is now making news too.) Sharing needles through opioid abuse is fueling this rise.

Another reason that opioids are making the news has to do with how it is prescribed. In some cases, opioids are over-prescribed. Just as bad, is that in some cases opioids are under-prescribed, leaving patients in misery. I am not going to dive in to this debate, but for those looking for well-written information on this, I highly recommend Judy Foreman’s book, “A Nation in Pain.”

**What’s Ahead**

When it comes to managing pain, there are more choices than just prescription and OTC medications. **Next month**, I will present information on effective alternatives, such as medical marijuana and drug-free pain management techniques including an effective technique that may surprise you.

**Resources**

LiverTox: Clinical and Research Information on Drug-Induced Liver Injury - livertox.nih.gov

U.S. Veterans Administration’s: [Viral Hepatitis and Managing Pain](https://www.hepmag.com/article/hepatitis-and-pain-27373-2048597063)

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