HEPATITIS C

Patient Information Fact Sheet

What is hepatitis C?

Hepatitis C virus (HCV), the most common blood-borne infection in the United States, is widely regarded as a "silent killer." Although it can be detected in the blood in as little as 1–3 weeks after exposure, patients may not display any symptoms of this deadly disease for years, even decades. According to the Centers for Disease Control and Prevention (CDC), chronic HCV infection develops in 70–85% of infected persons, 60–70% of whom display evidence of liver disease.

The following statistics reflect the high prevalence of HCV in the U.S. and around the world:

- Approximately 4 million persons in the U.S. are chronically infected with hepatitis C.
- Globally, up to 3% of the population may be infected with HCV (including those undiagnosed).
- For every 100 persons infected with HCV, 1–5 will die from it, in the form of liver cancer or cirrhosis of the liver.

While hepatitis C can be life-threatening, statistics show that the number of acute, symptomatic cases has declined sharply in the U.S. over the past 20 years, from >3 cases per 100,000 people in 1992 to <0.5 per 100,000 in 2008. Moreover, the disease is far less prevalent in men than it used to be. In the early 1990s, infected males outnumbered infected females by a 3:1 ratio, but by 2008 the rate had narrowed to almost 1:1, with the overall incidence of HCV leveling off among both sexes.

What are the symptoms of hepatitis C?

According to the CDC, roughly 20–30% of newly infected patients will experience fatigue, abdominal pain, poor appetite, or jaundice. Generally, symptoms occur within 4–12 weeks after exposure to the virus. While chronic liver disease in HCV-infected patients progresses slowly, other symptoms that should trigger further investigation include joint pain, fever, dark urine, clay-colored stools, nausea, and vomiting. Again, with any type of "silent" disease, symptoms may be mild and less likely to prompt a visit to a doctor.

What causes hepatitis C?

Hepatitis C virus is transmitted through contact with infectious blood, usually by persons who have injected drugs, even if it was only once many years ago. HCV can also be contracted through donated blood, blood products, and donated organs (although this is much rarer these days due to better screening procedures); needle-stick injuries in health care settings; and mother-to-child transmission in cases in which the pregnant mother is infected with HCV.

Hepatitis C virus can also be spread through other, less frequent, ways, such as by having unprotected sex with an HCV-infected person or sharing personal items that may be contaminated with infectious blood—toothbrushes, razors, and tools for tattooing or body piercing, for example. Some invasive medical procedures may also be at fault, although this is rare. Contrary to popular belief, breastfeeding, sneezing/coughing, and hugging do not transmit the virus, nor is it spread through food and water.

What tests confirm a diagnosis of hepatitis C?

According to the American Association for Clinical Chemistry, an **anti-HCV** test detects the presence of antibodies to the virus, but it can't tell the difference between an active or previous HCV infection. Further complicating the picture is the fact that a "weakly positive" result may actually be a false positive. To confirm a weakly positive result, a **HCV RIBA** test should be ordered to distinguish true exposure from a false alarm. It's not perfect either, however, and occasionally will result in an "indeterminate" RIBA. And, as with the anti-HCV test, the RIBA test can't differentiate between a current or past infection. In such cases, further testing may be necessary. A positive result may signal the need to biopsy the liver, to assess the amount of damage.

How is hepatitis C treated?

While there is no vaccine to protect against hepatitis C virus, people with hepatitis C are recommended to get vaccinated for Hepatitis A and B. In May 2011 the U.S. Food and Drug Administration approved two additional drugs—**telaprevir** (Incivek) and **boceprevir** (Victrelis)—to improve the cure rates of patients with HCV genotype 1, which is the most common form of hepatitis C in the U.S. These new drugs, known as direct-acting antivirals (DAAs), are intended only for use with **pegylated interferon** (Pegasys) and **ribavirin** (Copegus), the current combination used to treat hepatitis C. The new DAAs, if not used properly, can actually cause increased resistance to HCV, making the virus much more difficult to treat later on. The DAAs also have more side effects than the standard interferon/ribavirin combination and thus will require greater monitoring and skill on the part of prescribers. According to the American Association for the Study of Liver Diseases, telaprevir and boceprevir are the first of a "wave" of new drugs for hepatitis C that will reach the market in coming years.

Further information

Hepatitis C Information for Health Professionals: www.cdc.gov/hepatitis/HCV/index.htm

American Liver Foundation—Hepatitis C: www.liverfoundation.org/abouttheliver/info/hepatitisc/

World Health Organization—Hepatitis C: www.who.int/mediacentre/factsheets/fs164/en/index.html

New York City Department of Health and Mental Hygiene: www.nyc.gov/html/doh/html/living/cd-hepatitisc.shtml

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