Hepatitis C

Overview

Hepatitis C is a liver disease caused by the hepatitis C virus (HCV) that typically produces no symptoms. Over decades, it can lead to severe liver disease, including cirrhosis and liver cancer. Most of those infected are unaware that they have the disease. HCV is the most common chronic blood-borne infection in the United States, with an estimated 4.1 million Americans (1.8 percent of the population) being infected. The virus is transmitted via blood, most commonly by injection drug use, and, before 1992, by blood transfusion. No vaccine is available and no medications have proven effective in preventing infection after exposure.

Hepatitis C can be acute or chronic. Most people (70–85 percent) develop chronic infections. The disease progresses very slowly; within 20 to 30 years after infection, 10 to 20 percent of those with chronic disease will develop cirrhosis, and 1 to 5 percent liver cancer.

The infection is diagnosed by detection of HCV virus antibodies in blood. Since screening procedures for blood donors were instituted in the early 1980s, the predominant mode of HCV transmission in the U.S. has been injection drug use, which accounts for an estimated 60 percent of new cases.

Although the prevalence of HCV infection is higher among persons with multiple sexual partners, the risk of transmission between long-term steady partners is low. The risk of transmission from mother to child during birth is 5 to 6 percent. Rates of HCV infection in health care workers are the same as, or lower than, rates in the general population, although unintentional needle stick injury still poses a risk.

The treatment for hepatitis C has evolved substantially since the introduction of highly effective therapies in 2011. Since that time, new drugs with different mechanisms of action have become, and continue to become, available. For a complete list of currently FDA-approved therapies to treat hepatitis C, visit: <u>www.hepatitisc.uw.edu/page/treatment/drugs.</u>

Hepatitis C in Florida

Hepatitis C was made a notifiable disease in Florida in July 1999. Prior to that time, all hepatitis C cases were classified as "hepatitis non-A/non-B."

In 2016, Florida reported 29,757 cases of hepatitis C. Forty-seven percent of chronic hepatitis C cases are in individuals aged over 50 years, whereas 19 percent of chronic hepatitis C cases are in individuals aged under 30 years. However, 37 percent of acute, or newly infected, hepatitis C cases are in individual under 30 years in age; this is due in part to increasing rates of injection drug use related to the opioid epidemic.

Who should be tested for HCV?

- All Baby Boomers born from 1945–1965
- Anyone who had a blood transfusion or organ transplant before July 1992
- Persons who were ever on long-term hemodialysis
- People who injected drugs, even once many years ago
- Persons with hepatitis B or HIV/AIDS

Modes of Transmission

The hepatitis C virus (HCV) is found in blood, and can be spread by:

- Sharing injection drug equipment
- Blood transfusion or organ transplant before 1992
- Receiving clotting factor concentrates before 1987
- An infected mother to her infant during delivery
- Occupational exposure through needle stick
- Sexual contact

Symptoms 1 -

The incubation period can vary from 2 to 26 weeks, with an average between 6 to 9 weeks.

Acute Hepatitis C

People who are infected with hepatitis C are usually asymptomatic. However, if a patient has acute hepatitis C, symptoms may include:

- Jaundice
- Dark urine
- Diarrhea
- Nausea
- Fatigue
- Stomach pain

Chronic Hepatitis C

Chronic hepatitis C refers to an infection where the body is not able to eliminate the virus. Most of those infected are asymptomatic and it may take 10 to 30 years from the original time of infection to recognize chronic hepatitis C.

Vaccination and Prophylaxis

There is no vaccine currently available for the hepatitis C virus.

Treatment

Treatment options for hepatitis C are determined by blood test, liver biopsy results and other factors, and are not based solely on the presence of symptoms, since the disease is typically asymptomatic.

References

- 1. Centers for Disease Control and Prevention (CDC). Recommendations for prevention and control of hepatitis C virus infection and HCV-related chronic disease. MMWR 1998;47 (No. RR-19)
- CDC. Testing for HCV infection: An update of guidance for clinicians and laboratorians. MMWR 2013; Vol. 62
- 3. CDC website: cdc.gov/hepatitis/hcv
- 4. CDC. MMWR Recommendations for the Identification of Chronic Hepatitis C Infection Among Persons Born During 1945–1965 August 17, 2012 / 61(RR04);1-18
- 5. Florida CHARTS