

NATIONAL HEMOPHILIA FOUNDATION www.hemophilia.org

Hepatitis

Hepatitis is an inflammation of the liver that occurs when the liver is injured or infected. It can range from being asymptomatic to becoming a life-threatening condition. Symptoms may include fatigue, nausea, vomiting, muscle and joint aches, liver tenderness and enlargement and/or weight loss. Hepatitis can be acute (lasting less than six months) or chronic. It occurs commonly throughout the world.

Hepatitis can be caused by any substance that damages the liver, including alcohol, drugs, chemicals, viruses or a combination of any of these. Hepatitis caused by viruses is called viral hepatitis and can be transmitted through blood and blood products.

Six different viruses are now known to cause hepatitis – hepatitis **A**, **B**, **C**, **D**, **E** and **G**. Hepatitis A, B and C account for almost 95% of all cases of viral hepatitis. The other strains are uncommon.

Today's factor products are much safer than those of the past, though there is still some risk of getting hepatitis from clotting factor. Screening methods to identify donors with hepatitis have become more sensitive, greatly lowering the chances of transmitting one of the hepatitis viruses. Also, new viral inactivation methods now are being used on clotting factor products that make them much safer to use. As of 1997, there have been no reports of hepatitis C transmission through clotting factor that has been treated with these new processes. Hepatitis B and D are also killed by these methods.

There is no known case of hepatitis E transmission through blood products.

Small numbers of people with hemophilia have been exposed to hepatitis G, probably through blood products.

Hepatitis A has been found in solvent detergent-treated clotting factor, in part because hepatitis A can resist the viral-killing methods now being used. Transmission of hepatitis A remains a risk for people with bleeding disorders who use plasma-derived products. However, hepatitis A may be prevented by immunization with a vaccine.

Today's blood safety measures, though highly advanced, are not perfect. Whole blood and blood components, including packed red blood cells, platelets and cryoprecipitate cannot be treated with currently available virus-killing methods. Plasma may now be created with the same viruskilling methods (solvent-detergent plasma) used for hemophilia products. This is because these methods would damage or inactivate important blood components, making these blood products useless.

According to recent figures, for each unit of blood the risk of getting hepatitis C is less than one in 103,000, while the risk of getting hepatitis B is one in 63,000.

As a health precaution, it is advised that persons with bleeding disorders get vaccines against both hepatitis A and hepatitis B.

They should also be tested for hepatitis C on a yearly basis. There is, however, no vaccine for hepatitis C.

Prevention

High-risk activity that may lead to the transmission of hepatitis includes direct sexual contact with an infected person, sharing needles and coming into contact with infected blood. In some cases of hepatitis, little is known about how the infection is acquired.

Good hygiene helps prevent the spread of hepatitis A. Because the stool of people with hepatitis A is infectious, stool samples must be handled with special care. The same is true for the blood of people with any type of acute hepatitis. On the other hand, infected people don't require isolation — it does little to prevent the transmission of hepatitis A, and it won't prevent the transmission of hepatitis B or C.

Vaccinations are available against hepatitis A and B.

Vaccination is especially important for people at risk for contracting hepatitis B, though it isn't effective once the disease is established. For these various reasons, universal vaccination of all people against hepatitis B is being increasingly recommended.

A hepatitis B vaccine is recommended for all children by the American Academy of Pediatrics. A hepatitis A vaccine is recommended for all individuals two years of age and older with hemophilia and other congenital bleeding disorders.

Hepatitis A vaccines are given to people who are at a high risk of acquiring the infection, such as travellers to parts of the world where the disease is widespread.

No vaccines are available against the hepatitis C, D and E viruses.

People who haven't been vaccinated and are exposed to hepatitis may receive an antibody preparation (immune serum globulin) for protection.

The infection can be detected by simple, routine blood tests performed by doctors who suspect infection. Unfortunately, many people with hepatitis are never tested because they have no symptoms; by the time their infection is discovered, serious liver damage may have occurred. If someone thinks he or she may be infected, a doctor should be seen as soon as possible.

Treatment

People with unusually severe acute hepatitis may require hospitalization, but in most cases treatment isn't necessary. After the first several days, a person's appetite usually returns and they don't need to stay in bed. Severe restriction of diet or activity are unnecessary, and vitamin supplements are not required. Most people can safely return to work after the jaundice clears, even if their liver function test results aren't quite normal.

Acute viral hepatitis symptoms can range from minor flu-like illness to liver failure. Hepatitis B is usually more serious than hepatitis A and is occasionally fatal, especially in elderly people. The course of hepatitis C is unpredictable. The acute illness is usually mild, but liver function may improve, stay the same or worsen over months to years. Fifteen percent of persons will spontaneously clear the virus and only 15% will develop severe liver failure.

A person with acute viral hepatitis usually recovers after four to eight weeks, even without treatment.

• Hepatitis A rarely if ever becomes chronic.

• Hepatitis B becomes chronic in 5 to 10 percent of the infected people and can be mild or full-blown.

• Hepatitis C has the greatest likelihood of becoming chronic — about a 70% chance. About one-third of chronic carriers have normal liver enzymes, and 70% will persist with elevated liver enzymes.

Though usually mild and often without symptoms, hepatitis C is a serious problem because about 20% of the infected people may eventually develop cirrhosis of the liver.

A person with acute viral hepatitis can become a chronic carrier of the virus. In the carrier state, the person has no symptoms but is still infected.

This situation occurs only with hepatitis B and C, not hepatitis A.

A chronic carrier has a higher chance (about six times the risk) of developing liver cancer.

New advances and developments in the field of hepatitis are constantly being made.

Contact HANDI, the information center of the National Hemophilia Foundation, at 800-42-HANDI for current updates and news briefs.



Source: National Hemophilia Foundation

