Hepatitis A

Overview

Hepatitis A is a contagious liver disease that results from infection with the hepatitis A virus (HAV). It can range in severity from a mild illness lasting a few weeks to a severe illness lasting several months. Hepatitis A is usually spread when a person ingests fecal matter—even in microscopic amounts—from contact with objects, food, or drinks contaminated by the feces, or stool, of an infected person.

Who is at risk for HAV?

Although anyone can get hepatitis A in the United States, certain groups of people are at higher risk, such as those who:

- Travel to or live in countries where hepatitis A is common
- Are men who have sex with men
- Use illegal drugs, whether injected or not
- Have clotting-factor disorders, such as hemophilia
- Live with someone who has hepatitis A
- Have oral-anal sexual contact with someone who has hepatitis A

Once you recover from hepatitis A, you develop antibodies that protect you from the virus for life. An antibody is a substance found in the blood that the body produces in response to a virus. Antibodies protect the body from disease by attaching to the virus and destroying it.

Modes of Transmission

The hepatitis A virus (HAV) is usually spread via the oral-fecal route. People can get hepatitis A through:

Person-to-Person Contact

- When an infected person does not wash his or her hands properly after going to the bathroom and touches other objects or food
- When a parent or caregiver does not properly wash his or her hands after changing diapers or cleaning up the stool of an infected person
- When someone has sexual contact with an infected person (not just limited to anal-oral contact)

Contaminated Food or Water

- Hepatitis A can be spread by eating food or drinking water that is contaminated with the virus
- It is also transmitted by consuming contaminated raw shellfish
- In the United States, chlorination of water kills the hepatitis A virus that enters the water supply

Symptoms 1 -

The incubation period for hepatitis A is 15 to 50 days, with an average of 28 days. While children who contract hepatitis A typically have no symptoms, adults can become very ill and display the common hepatitis symptoms:

- Fever
- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Abdominal pain
- Dark urine
- Joint pain
- Jaundice (a yellowing of the skin or eyes)

Vaccination and Prophylaxis

The hepatitis A vaccine is highly effective in preventing hepatitis A virus infection. Protection begins approximately two to four weeks after the first injection. A second injection, given six months later, results in long-term protection. The vaccine also comes in a combination form, containing both hepatitis A and hepatitis B vaccine, that can be given to persons 18 years of age and older. This form is given as three shots, over a period of six months.

No serious side effects have resulted from the hepatitis A vaccine. Soreness at the injection site is the most common side effect reported. As with any medicine, there are very small risks that a serious problem could occur after someone gets the vaccine. However, the potential risks associated with hepatitis A are much greater than the potential risks associated with the hepatitis A vaccine. Before the vaccine became available in the United States, more than 250,000 people were infected with the virus each year. Since the licensure of the first hepatitis A vaccine in 1995, millions of doses of hepatitis A vaccine have been given in the United States and worldwide, and has decreased the number of reported acute hepatitis A cases by 93.7% overall from 1990 to 2009.¹

Hepatitis A vaccination is recommended for:

- All children at age one year
- Travelers to countries that have high rates of hepatitis A
- Men who have sex with men
- Users of injection and non-injection illegal drugs
- People with chronic (lifelong) liver diseases, such as hepatitis B or hepatitis C
- People who are treated with clotting-factor concentrates
- People who work with hepatitis A-infected animals or in a hepatitis A research laboratory

There are two types of products available for prophylaxis and prevention of hepatitis A infection:

¹ https://www.cdc.gov/vaccines/pubs/pinkbook/hepa.html

Hepatitis A vaccine provides active immunity against the hepatitis A virus through a series of two injections, with the second given at six to 12 months after the first. The vaccine can provide protection as soon as four weeks after the first injection.

Immune Globulin (IG) provides protection against hepatitis A through the passive transfer of an antibody. IG provides temporary immunity to the virus for two to three months, if administered prior to exposure or within two weeks after exposure.

Treatment

There is no specific treatment for hepatitis A, only the management of symptoms. The infection will clear up within a couple of months, and the patient will be immune to the virus.

References

- 1. Sexually Transmitted Diseases Treatment Guidelines 2015, MMWR 2015;64(3); (includes a chapter on Hepatitis A)
- 2. Updated Hepatitis A Postexposure Prophylaxis and Travel Vaccination Recommendations (<u>http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5641a3.htm</u>) MMWR 2007;56(41):1080–4
- 3. Prevention of Hepatitis A Through Active or Passive Immunization:
- 4. Recommendations of the Advisory Committee on Immunization Practices (ACIP) (<u>http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5507a1.htm</u>) MMWR 2006;55(RR-7)
- 5. Centers for Disease Control and Prevention website: www.cdc.gov/hepatitis