

Viral Hepatitis... Types... Symptoms... Treatment

Hepatitis is one of the infectious diseases, caused by a viral infection affecting the liver and damaging its cells, temporarily or permanently.

There are five types of hepatitis viruses, hepatitis A, B, C, D and E, as well as other types which are unclassified or with no clear link such as hepatitis "G".

First: Hepatitis A:

- Hepatitis A is highly infectious, but rarely fatal.
- The infection is increasing among children and within the large and poor communities, and during travelling to countries where the virus is rampant.

Incubation period:

The incubation period of the Hepatitis A usually ranges between 15-50 days.

Ways of infection and spread:

- The virus is detected in the stool of the people infected with Hepatitis A.
- The infection is usually picked up from person to another through food and drinking items contaminated with the virus of an infected person.
- The infection is also transmitted by eating uncooked food such as some that are eaten raw like oysters and vegetables, and fruits eaten without peeling or after cleaning food with contaminated water.

Symptoms:

The initial symptoms of the hepatitis A are similar to the ones reported in the Influenza, and no symptoms may appear on the children infected.

The symptoms experienced by the infected:

- Exhaustion and general weakness of the body.
- Pain in the body
- Change in urine color to the dark color.
- Nausea and vomiting.
- Diarrhea.



وزارة الصحة Ministry of Health

- Fever.
- Yellowing of the skin and eye.
- Severe dehydration due to vomiting.
- Loss of appetite.
- Pains in the upper right area of the abdomen.

Treatment:

- There is no specific treatment for the hepatitis A, and the infected person can be cured within several weeks to months with a medical follow-up of the liver functions.
- The purpose of the treatment is to keep the patient comfortable and ensure a suitable, balanced diet, including making up for the fluids lost by vomiting and diarrhea.

Prevention of the disease:

- Providing pure, drinkable water.
- Disposing the sewage water in correct ways.
- Paying attention to the personal hygiene, such as washing hands regularly, and washing or peeling the vegetables and fruits before eating.
- Taking the available vaccinations for protection against the hepatitis A: they are safe to be administered to the children at the age of a year, and they are usually advised to be taken before travelling to the places affected by the disease.

Second: Hepatitis B:

- It is a viral infection afflicting the liver, and this disease poses a major public health problem.
- The infected person is likely to develop a chronic liver disease or face death, Allah forbids, as a result of complications taking place such as cirrhosis or liver cancer.
- There are about two billion persons infected with the hepatitis B worldwide.
- The hepatitis B vaccine has been made available since 1982.

Incubation period:

On average, the incubation period of the hepatitis B virus amounts to 90 days, after which the symptoms start to appear on the infected person, ranging from 60-150 days.

Symptoms:

The hepatitis B virus causes acute symptoms lasting for several days, including the following:

- Pain in the body
- Change in urine color to the dark color.
- Nausea and vomiting.
- Diarrhea.
- Fever.
- Yellowing of the skin and eye.
- Severe dehydration due to vomiting.
- Pains in the upper right area of the abdomen.

Ways of infection:

- Sexual intercourse: The hepatitis B infection is transmitted through the direct sexual intercourse with an infected person without using the protective ways such as the vaccine, as the virus runs in the blood and secretions of the infected person.
- Using needles and syringes contaminated with the virus of an infected person.
- Exposure to a prick of a needle contaminated with the blood of a person infected with the Hepatitis B, unintentionally such as people working in the health field and laboratories.
- From the mother to infant during childbirth: We can prevent transmission of the infection to the infant by giving the antiviral vaccine immediately after delivery and the close medical follow-up.

Stages of infection with Hepatitis B:

- **Acute Hepatitis:** Lasts for less than six months, and the immune system in the body can kill the virus in case of infection. However, some cases may progress to the chronic stage, if the immune system fails to fight the virus.
- **Chronic Hepatitis:** After a person is infected for more than six months, and the immune system renders unable to get rid of the virus, the disease progresses to the chronic stage. Similarly, the person may remain without apparent symptoms for a long period, extending to several years. And, the disease may develop in the absence of careful medical follow-up, triggering implications.

Potential complications related to the chronic hepatitis cases:

- **Cirrhosis:** the infection with the Hepatitis B may result in scar and cirrhosis of the liver which may influence the ability of the liver to perform its normal functions.
- **Liver cancer:** the persons with hepatitis B are more vulnerable to develop the liver cancer.
- **Liver failure:** the condition of some of the infected with hepatitis B may develop to reach liver failure and the infected with the liver failure will be in need of liver transplant.
- **Kidney Problems:** The Hepatitis B infection may cause problems in the kidney, affecting its functions and leading to the kidney failure.

Treatment:

The treatment of the Hepatitis B patient depends on the virus activeness and the disease progress.

Treatment of acute Hepatitis B cases:

The doctor does not turn to the use of antiviral drugs to treat the symptoms associated with the acute viral Hepatitis, instead he recommends the following:

Taking enough rest.

- Eating fresh vegetables and fruits.
- Drinking fluids, especially water.

- Taking some analgesics.

Most people infected with the acute symptoms got cured without the need for medical intervention and drug therapy. But, in case the disease happens to progress or symptoms to persist for a long time the doctor may turn to using medications to treat the symptoms.

Treatment of chronic Hepatitis B cases:

- The treatment depends on the extent of the virus activeness in the body.
- The goal of the treatment is to prevent the liver from being damaged by means of inhibiting the virus reproduction.
- The antiviral medications are used if the virus is active and there is a risk of the liver being damaged.
- The antiviral medications are not given to all infected with the chronic hepatitis B; however, they are in need of constant medical follow-up and examinations to determine how active the virus is in the body and the damage in the liver tissues.

Liver transplantation:

In the advanced stages of the chronic liver inflammation, during which the liver tissues got damaged, the person may need a liver transplant.

Prevention:

- All infants should be vaccinated with Hepatitis B vaccines to protect them against the infection.
- The vaccine is given in three separate doses.
- In the areas where the virus transmission rates from the mother to their infant are high, the first dose should be given as soon as possible after delivery, i.e. within 24 hours.
- The vaccine is given to all children and adolescents under the age of 18 years who have never given the vaccine before.

The vaccine is given to the persons coming under the high-risk groups like:

- Those in contact with the carriers of Hepatitis B virus at home.
- Those in a much need of blood transfusion or its products.
- Those undergoing organ transplantation procedures.
- Those facing the risk of getting infected with the Hepatitis B virus by virtue of their work in the health field.
- Those traveling to countries with high rates of Hepatitis B infection.
- Avoiding sharing with others the use of the personal items that are likely to be contaminated or could penetrate the skin such as needles or shaving razors or toothbrushes.
- Avoiding out of wedlock sexual relationships.

Third: Hepatitis C:

It is caused by virus C and transmitted through the blood or its products from the person infected with the virus.

- It is an inflammation caused by a virus which attacks the liver and leads to inflammation.
- Most of the people infected with the hepatitis C don't show symptoms, and only through routine medical tests do they know that they are infected.

Ways of infection and spread:

- Sexual contact: The infection of the Hepatitis C could be transmitted through direct sexual contact with an infected person.
- Exposure to a prick from a needle contaminated by the blood of a person infected with the Hepatitis C by mistake, such as those working in the health field and laboratories.
- Sharing needles, particularly among those doing drugs.

- The Hepatitis C infection is not transmitted by handshaking or embracing the person infected with the virus or carrying it or sitting next to them.

Incubation period:

The incubation period of the hepatitis C ranges from two weeks to six months.

Symptoms:

- Loss of appetite.
- Nausea and vomiting.
- Pains in muscles and joints.
- Fever.
- Dark urine
- Yellowing of the skin

Treatment:

- The Hepatitis C doesn't always require treatment.
- There are six genotypes of it that may show different response to treatment; therefore, it is necessary to do accurate tests for the patient before starting treatment to determine the appropriate treatment plan.
- The antiviral drugs can be used as group drugs for treating the inflammation.

Prevention:

- Avoiding sharing the personal items like toothbrushes and shaving razors.
- Be cautious when dealing with contaminated blood, especially those working in the health field.
- Wearing gloves while dealing with the blood in home accidents "wounds", when it happens that a family member is infected with the Hepatitis C.
- Avoiding the prohibited sexual relations.

Fourth: Hepatitis D:

The virus D, also called "Delta virus", can only reproduce in the presence of another virus; hence it is always associated with the Hepatitis B virus.

Ways of infection:

The Hepatitis D is transmitted through:

- Blood Transfusion or its products.
- Sexual intercourse.
- Those doing drugs through injection.

Treatment:

We can use the same medicines used for treating the Hepatitis B, and the doctor may turn to using higher doses in case of getting infected with the viral inflammation (B) and (D).

Prevention:

so far, there is no vaccination against this virus, but since the infection with the virus D only happens with the presence of the virus B. then vaccinating against the hepatitis B provides protection against the two viruses, even if indirectly in case of the hepatitis D.

Fifth: Hepatitis E:

The virus is mainly transmitted orally through having food or drinking items , contaminated with the Hepatitis E. And since the virus is found in the faeces of the infected person, the cause of infection is usually down to the drinking water contaminated with the feces holding the virus causing the disease.

Incubation period:

The incubation period of the Hepatitis E ranges between 3-8 weeks by an average of 40 days.

Symptoms:

- Jaundice
- General weakness.
- Weak appetite.

- Nausea.
- Abdominal pain
- Fever
- Dark urine.
- Pains in the joints.

Prevention:

Some of the steps to be followed to prevent spreading the disease and catching it:

- Sterilizing drinking water sources.
- Eating non contaminated or cooked foods as the heat destroys the virus.
- Preventing getting the drinking water contaminated with the sewage water.
- Paying attention to the personal hygiene, especially those infected, by washing hands with water and soap after using the toilet.

Treatment:

- Most cases don't need antiviral drugs, but a patient may need rest and eat fresh vegetables and fruits as well as sufficient amounts of fluids.
- In cases where the disease is progressing and shows complications the person may be in need of an appropriate medical intervention.

Clinical Health Education Department

For more information, please contact us by email on:

Hpromotion@moh.gov.sa