What you need to know about hepatitis B

What is hepatitis B?

- Hepatitis B is a liver disease caused by hepatitis B virus (HBV) infection.
- Infants and young children are mostly asymptomatic when newly infected with HBV, while 30% - 50% of older children or adults with acute hepatitis B may develop symptoms that are undistinguishable from hepatitis of other causes, such as fever, fatigue, loss of appetite, nausea, vomiting, upper abdominal discomfort, tea-coloured urine and jaundice (yellowing of the skin and the whites of eyes).
- Some people fail to clear the virus and develop chronic hepatitis B (CHB). The younger a person is when infected with HBV, the higher the risk of developing chronic infection.
 - Up to 90% of newborn babies infected with HBV would develop CHB
 - About 5% of HBV infection acquired in adulthood would lead to CHB
- About 15 40% of untreated people with CHB could develop cirrhosis and liver cancer. They may remain asymptomatic until signs and symptoms develop secondary to serious liver damage.
- About 80% of liver cancer patients in Hong Kong are infected with HBV.
- Since 1988, universal childhood hepatitis B vaccination programme has been implemented in Hong Kong, greatly reducing the risk of HBV infection.

How is hepatitis B transmitted?

- Mother-to-child transmission (MTCT)
- HBV can be transmitted from mothers with CHB to their babies during delivery.
 In endemic places, most persons with CHB acquired HBV infection by MTCT.
- Contact with blood or body fluids of an infected person
 - Contact with an infected person's blood or body fluids through broken skin, or mucosal membranes of the eyes or mouths
 - Sharing injection instruments for drug injection
 - Using contaminated instruments for ear-piercing, tattooing or acupuncture
 - Sharing personal items, which may be contaminated with blood, such as razors, shavers and nail trimmers
 - Reusing inadequately sterilised medical equipment
 - Transfusion of contaminated blood or blood products
- Sexual contact
 - Unprotected sexual contact with an infected person
- HBV is not transmitted through breastfeeding or social contact, such as sharing

eating utensils, dining together, hugging, shaking hands and kissing.

Persons at higher risk of hepatitis B infection should get tested

Persons considered at higher risk of infection include:

- Family members (such as parents, siblings and offspring) and sexual partners of people with CHB
- People who inject drugs
- Men who have sex with men
- HIV-positive people
- People who receive blood or blood products on a regular basis
- People on dialysis
- Healthcare workers who may have occupational exposure to blood or body fluids of patients

The test generally consists of blood tests on **hepatitis B surface antigen (HBsAg)** and **hepatitis B surface antibody (anti-HBs)** for assessing hepatitis B infection and immune status respectively.

Test results		
HBsAg	Anti-HBs	Clinical interpretation
Positive (+)	Negative (–)	 Infected with HBV Should seek medical consultation as early as possible Persistence of HBsAg for more than 6 months indicates chronic HBV infection
Negative (–)	Positive (+)	 No HBV infection Have adequate protective antibodies against HBV infection
Negative (–)	Negative (–)	 No HBV infection Not immune to HBV infection and may consider hepatitis B vaccination

How to treat hepatitis B infection?

- Antiviral medication is effective in inhibiting HBV replication and reducing the risk of cirrhosis, liver failure and liver cancer.
- Doctors will thoroughly assess the condition of each patient with CHB to determine when antiviral medication is needed.

 All CHB patients should have regular medical follow-up and relevant investigations, such as blood test for liver function, alpha-fetoprotein and viral load, and ultrasonographic abdominal examination, for early detection and management of changes in the liver condition.

How to prevent hepatitis B infection?

- Receive hepatitis B vaccination to acquire immunity against HBV infection
- Wear gloves while handling open wounds with care and bandage them properly
- Do not share personal care items which may be contaminated with blood, such as razors and nail scissors
- Do not share needles or any other injecting equipment
- Practice safer sex and use condom
- Wear gloves and use household bleach to disinfect items contaminated by blood or body fluids

To get tested for hepatitis B, please consult your family doctor.



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