

Hepatitis B

Introduction

- Hepatitis B is a virus that causes inflammation of the liver.
- It can be acute (lasts for less than six months) or chronic (life-long) illness.
- There is an effective vaccination for hepatitis B.
- Chronic hepatitis B (CHB) cannot be cured but can be well managed.
- If you have CHB the risk of getting liver cirrhosis, liver cancer and liver failure is increased. This risk is higher if you do not get regular check-ups and manage your hepatitis B.

Prevalence

- In 2016 it was estimated that 233 034 people were living with hepatitis B in Australia.
- Approximately only 63% of these have been diagnosed.
- In 2017 there were 5 819 newly diagnosed hepatitis B cases in Australia.
- In Australia the risk of having hepatitis B is higher for some people than others. Those born overseas in countries with higher rates of hepatitis B and Indigenous Australians make up two thirds of people living with CHB in Australia. People who inject drugs and men who have sex with men also have higher rates of hepatitis B.

Transmission

- If you are exposed to the virus as an infant you have a 90% chance of developing chronic hepatitis B.
- In childhood this is 30%.

- This is compared to adults with healthy immune systems who have only a 5% of progressing to chronic hepatitis B.

- Hepatitis B is both a **blood borne virus (BBV)** and **sexually transmitted infection (STI)**.

- It can also be transmitted from mother to baby. This is called **vertical transmission**.

The risk of vertical transmission is high, however with good specialist ante-natal care, this risk can be reduced to almost nothing.

This may include medication for the mother during pregnancy and both hepatitis B vaccination and another injection called immunoglobulin for the baby as soon as practical after birth.

- There are a lot of myths about the transmission of hepatitis B. Hepatitis B **cannot** be spread through sharing or preparing food or casual contact such as hugging or shaking hands.

Symptoms

- Many people do not have symptoms with hepatitis B infection.
- Some symptoms of acute hepatitis can be: flu like illness, loss of appetite, weight loss, dark urine, yellow skin and eyes and right upper quadrant pain.

Natural history

- There are four main stages of CHB infection. These are immune tolerance, clearance, control and escape. Everyone goes through these stages at different rates.
- Immune **tolerance** means there are only low levels of liver inflammation or scarring.
- Immune **clearance** is when your body is responding to the hepatitis B virus and trying to fight it off causing inflammation.
- Immune **control** means your body has successfully controlled the virus and you have low levels of hepatitis B in the blood, normal liver function and minimal inflammation.
- Immune **escape** means the immune system has lost control of the virus and it is replicating. Liver damage may also occur.

Diagnosis and Treatment

- Hepatitis B is diagnosed by blood tests.
- These blood tests will tell you if you have ever been exposed to hepatitis B and cleared it, if you have been vaccinated or not and if you have hepatitis B currently.
- If the blood test shows you have hepatitis B it is important to get another test in six months to check if it is acute or CHB.
- If you have CHB it is important to get regular check-ups. These include a blood test and often a liver ultrasound. These will show which stage of the infection you are in, how healthy your liver is and if you need treatment or not. Your doctor will discuss with you how often you need testing.

- If the tests show you need treatment, you will always need to take the medication. It will not cure your CHB but will reduce the risks of liver damage, liver failure and liver cancer. Two common medications are Entecavir and Tenofovir.
- It is important to remember that medication is not appropriate for everyone with CHB.

Vaccination

- There is a safe and effective vaccination that prevents you from getting hepatitis B even if you are exposed to it.
- The hepatitis B vaccine teaches the immune system to produce antibodies that fight the virus. This makes you immune. It is not the hepatitis B virus and it cannot give you the infection.
- For babies it is recommended that they have a hepatitis B injection soon after birth and then at two, four and six months.
- The full course for adults consists of three injections over six months.
- Testing for hepatitis B before vaccination is recommended for people at increased risk.

This info sheet is intended as a general guide only. It is not intended to replace expert or medical advice.

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