

10 THINGS YOU NEED TO KNOW ABOUT HEP C

1. WHAT IS HEPATITIS C?

Hepatitis C is an infectious liver disease caused by the hepatitis C virus (HCV). It is estimated that around 150 million people worldwide are infected with the virus, most commonly transmitted through contact with an infected person's blood.

There are two stages of hepatitis C: the first stage, following initial infection, is known as acute infection. Around one in five people will recover naturally from the disease during this time. The second stage, chronic infection, where the virus remains in the body, will affect the remaining 80% of those infected.

There are six different genotypes, or strains, of the hepatitis C virus. If you are infected, it is important to know which strain you have as this can impact on your treatment.

2. WHAT IS THE DIFFERENCE BETWEEN HEPATITIS A, B AND C?

The term **hepatitis** is used to describe an inflammation of the liver, typically caused by a viral infection, most commonly the hepatitis A virus, the hepatitis B virus or the hepatitis C virus. While each virus can cause similar symptoms, they are transmitted differently and can affect the liver in different ways. While there are currently



vaccines to prevent hepatitis A and B, there is no vaccine for hepatitis C.

Hepatitis A is the most common type of viral hepatitis. It is caused by the hepatitis A virus (HAV) which is present in the faeces of infected people. It is most commonly spread through contact with objects, food or drinks that have been contaminated with the faeces of an infected person.

Hepatitis A is generally a short-term, mild infection that may cause symptoms similar to a stomach virus. It generally passes within a few months.

A vaccine to protect against hepatitis A is available and is recommended if you are visiting regions where the virus is prevalent, such as Africa, Central and South America, the Far East, Eastern Europe and the Indian subcontinent.

Hepatitis B is caused by the hepatitis B virus, which can be found in blood and other body fluids. It can be spread through unprotected sex with an infected person or by sharing needles or syringes to inject drugs. It can also be passed from an infected mother to her baby. Most people who are infected with hepatitis B will fully recover from the infection within a few months but some will develop a long term infection, chronic hepatitis B, a serious disease that can cause long-term health problems and may result in death.

A vaccine to protect against hepatitis B is available and recommended for people in high-risk groups, such as drug users.

Hepatitis C is caused by the hepatitis C virus. Up to 150 million people worldwide are infected with the virus, most commonly transmitted through contact with an infected person's blood.



The hepatitis C virus can result in inflammation and damage to the liver, affecting its ability to function properly and, if not treated, can result in liver disease, liver failure or even death.

Hepatitis C is often referred to as a silent disease, as in most cases hepatitis C does not cause any symptoms, meaning that many people will be unaware that they are infected until their liver has become seriously damaged. Others may experience fatigue, nausea, flu-like symptoms, abdominal pain and jaundice, many of which may be attributed to other illnesses.

There is currently no vaccine available to prevent hepatitis C.

3. HOW COMMON IS HEPATITIS C?

It is thought that about 216,000 people in the UK are infected with hepatitis C. According to the World Health Organization (WHO), about three per cent of the world's population – that's around 150 million people - is infected with hepatitis C, resulting in around 350,000 deaths each year. Many of these people will be unaware they have the disease at first because they don't feel or look sick.

In the US, approximately 8,000 to 10,000 people die every year from hepatitis C-related liver disease.

4. HOW CAN YOU GET HEPATITIS C?

Hepatitis C is most commonly transmitted through contact with an infected person's blood. This can happen in a number of ways and you could be at risk from activities such as:

- » Sharing needles or syringes to inject drugs
- » Needlestick injuries in a healthcare setting
- » Being born to a mother who is infected with hepatitis C

It is possible, though not as common, for hepatitis C to be spread through sharing personal items that may have been in contact with another person's blood, like toothbrushes or razors, or through sexual contact with someone infected with hepatitis C.

Remember, hepatitis C cannot be spread by sharing cutlery or dishes, kissing, breastfeeding, holding hands, sneezing or coughing. It is not transmitted in food or water.

Some people may be at increased risk of contracting hepatitis C, including:

- » People who currently inject drugs
- » Anyone who injected drugs in the past, even if it was just once or a long time ago
- » Those who received donated blood (before September 1991 in the UK and before 1992 in the US)

- » Recipients of organ/tissue transplants in the UK before 1982
- » Those infected with HIV or AIDS
- » Children born to mothers infected with hepatitis C
- » People who have received body piercings or tattoos done with non-sterile equipment
- » Healthcare workers who have experienced needlestick injuries

If you are concerned about your health or feel that you might be at risk of hepatitis C, you should talk to your doctor. Getting diagnosed and treated early can help prevent liver damage.

5. WHAT ARE THE SYMPTOMS OF HEPATITIS C?

Often billed as the silent disease, hepatitis C causes symptoms in just 20 to 30 per cent of those infected. This means that many people who are infected with the hepatitis C virus do not know they are infected because they do not look or feel sick.

For those who experience symptoms, these may begin months or even years after being infected. Symptoms can be mild or severe and can include:

- » High temperature (fever)
- » Tiredness, lethargy and fatigue
- » Loss of appetite
- » Nausea
- » Vomiting
- » Muscular pain, aching joints
- » Jaundice (yellow color in the skin or eyes)

Many of these symptoms could be attributed to other conditions. If you are concerned or feel that you may be at risk of hepatitis C, talk to your doctor.

6. HOW DOES HEPATITIS C AFFECT THE LIVER?

The liver is one of the largest and hardest working organs in the body, with about

500 different functions. Among its jobs are processing food and drink into energy and nutrients used by the body, filtering the blood and fighting infection.

Over time, hepatitis C can damage the liver by weakening, then infecting and killing liver cells. This process will eventually result in scarred liver tissue, making it harder for the liver to work properly.

Extensive scarring in the liver is called cirrhosis. When this occurs, the liver cannot function normally. This can lead to serious complications and even death.

7. HOW IS HEPATITIS C DIAGNOSED?

Generally, two blood tests are used to check for hepatitis C.

The first is the antibody test which will show whether you have ever been exposed to the virus. It will test for antibodies to the virus generated by your immune system. Antibodies are produced by the immune system to fight viruses when they enter the blood. It takes the body some time to make these antibodies so a positive reaction will not be shown for some months after infection. If this antibody test is negative but you have been at risk of hepatitis C your doctor may advise you to take another test in a few months.

If your test results are positive this means that you have been infected with hepatitis C at some stage. Remember, 20 per cent of people will naturally recover from hepatitis C but the test will still show the presence of antibodies, so this does not necessarily mean that you are currently infected.

The second test is called a PCR test and this is done to check whether the virus is reproducing inside your body.

If you have hepatitis C your doctor might advise additional tests to check for liver damage. You may also be referred to a specialist to discuss the best treatment for you.



8. IS THERE A VACCINE FOR HEPATITIS C?

While there are licensed vaccines available to prevent hepatitis A and B, there isn't currently one for hepatitis C. This is partly because of the significant genetic variations between the six main genotypes of hepatitis C, as well as the fact that the virus mutates frequently.

Despite the challenges, scientists are continuing to investigate potential vaccines both for treating and preventing hepatitis C. Like all medical products, vaccines have to undergo rigorous clinical trials to demonstrate their safety, efficacy and quality. So, it is likely to be several years before we know whether this research will lead to the widespread availability of hepatitis C vaccines.

9. WHAT TREATMENTS ARE AVAILABLE FOR HEPATITIS C?

While there are medications for hepatitis C, not everyone with the virus requires treatment, nor are the available therapies always effective. Healthcare professionals and patients have to decide whether a particular treatment is appropriate after consideration of the risks and benefits for each individual.

The most common available treatment for hepatitis C involves two antiviral drugs that are taken together, pegylated interferon and ribavirin. This is known as combination therapy and is the first-line for treating the 2, 3, 4, 5 and 6 genotypes of the virus. Interferon is taken by injection, and ribavirin is taken orally as a pill.

Most recently, important scientific advances have led to the availability of a new type of treatment, known as protease inhibitors. Two of these drugs, boceprevir and telaprevir, have become the standard treatment for people infected with genotype 1 of the disease. These medications are taken orally, alongside interferon and ribavirin. This is known as triple combination therapy.

Boceprevir and telaprevir have not been approved by regulators in every country. Where they are not available, the combination therapy of interferon and ribavirin is the main type of treatment prescribed by doctors.

The main aim of treatment is to eliminate the hepatitis C virus. Medication is also taken to reduce inflammation and cell death in the liver, slow the onset of cirrhosis, reduce the risk of liver cancer, and avoid the need for liver transplantation.



Transplants are needed in cases where chronic HCV infection has caused severe liver damage. After transplant, patients usually need to continue taking antiviral drugs because re-infection with the virus is very common.

All drugs come with associated side-effects. Interferon can cause flu-like symptoms, fatigue, depression, difficulty in sleeping and loss of appetite. Ribavirin can cause nausea, rashes, dry cough and blood disorders.

Occasionally, the side-effects can be so bad that they cause patients to stop taking their medication. Also, because the virus has six variations, not every patient responds well to the available treatments. So, there is still demand for research into new and more effective medications.

Some of the most pioneering research into hepatitis C today is focused on developing 'all-oral' treatments. These would avoid the use of interferon and its known side-effects. In fact, several drug companies now view all-oral therapies as the holy grail of hepatitis C treatment.

10. HOW WILL HEPATITIS C IMPACT MY LIFE?

Hepatitis C is often referred to as a silent disease, as in most cases it does not cause any symptoms, meaning that many people will be unaware they are infected until their liver has been seriously damaged. So a positive diagnosis of hepatitis C may come as a shock to you.

If you do experience symptoms, these may begin up to six months after you have been infected. Symptoms can be mild or severe and can include:

- » High temperature (fever)
- » Tiredness, lethargy and fatigue
- » Loss of appetite
- » Nausea
- » Vomiting
- » Muscular pain, aching joints
- » Jaundice (yellow color in the skin or eyes)

Because of the link between hepatitis C infection and liver disease, it is important to avoid placing additional stress on this already overworked vital organ. You should refrain

from drinking alcohol, in particular, but also from taking some prescription and over-the-counter drugs. You should consult your doctor before taking any of these.

People taking hepatitis C drugs should also be aware of their side-effects. In the case of interferon-ribavirin combination therapy, the most common side-effects include flu-like symptoms, fatigue and depression.

Another challenge for hepatitis C patients is the stigma that can be associated with the condition. Although three per cent of the world's population – that's about 150 million people – is infected with hepatitis C, the disease is widely misunderstood. Some fear contracting the virus from infected people and there is some confusion between hepatitis A and hepatitis B.

Remember, hepatitis C cannot be spread by sharing cutlery or dishes, kissing, breastfeeding, holding hands, sneezing or coughing. It is not transmitted in food or water. Educating the public about the prevalence of hepatitis C, its symptoms and how it is transmitted should help to dispel these myths.

SOURCES

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