CONDITION

Hepatitis C

Hepatitis C is a blood-borne viral infection that can cause lasting liver damage if untreated.

WHAT IT IS
Blood-borne viral infection that inflames the liver

BODY SYSTEM
Liver and digestive system

MAIN SYMPTOMS
Often none, fatigue, nausea, yellow skin or eyes

WHAT CAUSES IT
Infection with the hepatitis C virus

HOW IT IS DIAGNOSED
Antibody blood test followed by HCV RNA testing

MAIN TREATMENT
Oral direct-acting antiviral medicines

CAN IT BE CURED?
Yes, antiviral treatment clears most infections

IS IT AN EMERGENCY?
Sometimes, with confusion, vomiting blood, or black stools

LONG-TERM OUTLOOK
Usually excellent after cure; cirrhosis still needs monitoring

Overview

Hepatitis C is an infection caused by the hepatitis C virus, also called HCV. It spreads mainly through contact with infected blood and affects the liver.

The liver filters blood, processes nutrients, makes important proteins, and helps remove waste. Hepatitis C causes inflammation in the liver. Over many years, untreated inflammation can cause scar tissue called fibrosis. Severe scarring is known as cirrhosis.

Some people clear the virus without treatment during the early, or acute, stage. For many others, it becomes a long-term infection called chronic hepatitis C. It can remain unnoticed for years because symptoms are often mild or absent.

Modern antiviral medicines can cure more than 95% of people who receive treatment. Cure prevents further injury from the virus and lowers the risk of liver failure and liver cancer.

However, people who already have cirrhosis usually need continuing liver checks after cure.

Symptoms

Most people have no symptoms when they first become infected. When early symptoms occur, they may begin several weeks or months after exposure.

Possible symptoms include:

Chronic hepatitis C may also cause no obvious symptoms. Some people notice long-term tiredness, difficulty concentrating, or a general feeling of being unwell. These symptoms have many possible causes and cannot confirm hepatitis C.

Symptoms may become more noticeable if severe liver scarring develops. These can include easy bruising, swollen legs, fluid collecting in the abdomen, or confusion. Vomiting blood, passing black stools, or becoming severely confused can indicate a complication that needs emergency care.

- Tiredness
- Reduced appetite, nausea, or vomiting
- Pain or discomfort under the ribs on the right
- Muscle or joint aches
- Dark urine or unusually pale stools
- Itchy skin
- Yellow skin or eyes, called jaundice

Causes and risk factors

Hepatitis C spreads when blood containing the virus enters another person's bloodstream. Sharing needles, syringes, or other equipment used to inject drugs is a common route of transmission. Equipment used to prepare or divide drugs can also carry blood.

Other possible routes include:

Sexual transmission is possible but is generally less efficient than direct blood-to-blood exposure. Risk is higher when sex causes bleeding, when someone has HIV, or when there are other sexually transmitted infections.

Hepatitis C does not spread through hugging, coughing, sneezing, sharing food, or using the same toilet. It is not spread through breast milk. If nipples are cracked or bleeding, temporary

advice about expressing or pausing feeding may be needed because blood can carry the virus.

- Needlestick injuries or other workplace blood exposure
- Tattoos or piercings done with equipment that was not properly sterilised
- Sharing razors, toothbrushes, or other items that may carry blood
- Blood transfusions or organ transplants performed before reliable screening began
- Medical or dental procedures in places without effective infection control
- Transmission from a pregnant person to their baby
- Sexual contact, particularly when blood exposure is possible

Diagnosis

A blood test is required because symptoms alone cannot diagnose hepatitis C.

The first test usually looks for antibodies to HCV. Antibodies are proteins the immune system makes after contact with the virus. A positive antibody result shows that exposure occurred at some point, but it does not show whether the virus is still present.

A second test checks for HCV RNA, the virus's genetic material. Detectable HCV RNA confirms a current infection. Many services automatically perform this second test on the original blood sample after a positive antibody result.

Testing may need to be repeated after a recent exposure because antibodies can take time to develop. An HCV RNA test may be used earlier or when the immune system is weakened.

If active infection is confirmed, further assessment may include liver blood tests, a blood count, kidney tests, and tests for hepatitis B and HIV. An ultrasound or a painless stiffness test called elastography may be used to look for liver scarring. Some people need testing for the virus subtype, although many current medicines treat all major subtypes.

Public health guidance in the United States recommends at least one hepatitis C screening test for all adults and screening during each pregnancy. Repeat testing is recommended for people with continuing exposure risk.

Treatment and management

Hepatitis C is treated with direct-acting antivirals like acyclovir or oseltamivir . These tablets block proteins that the virus needs to reproduce. Most people take tablets for about 8 to 12 weeks, although treatment length and medicine choice are not the same for everyone.

Treatment planning takes account of liver scarring, kidney function, previous hepatitis C treatment, other health conditions, and medicines or supplements you use. Some antivirals interact with acid-reducing medicines like omeprazole or lansoprazole , cholesterol medicines, seizure medicines, and certain herbal products. A pharmacist or prescribing clinician can check these safely.

A blood test is usually performed after treatment. If HCV RNA remains undetectable at least 12 weeks after the course is completed, this is called a sustained virologic response and is considered a cure.

Other parts of management may include:

Do not stop a prescribed medicine because of hepatitis C without medical advice. Common pain medicines and herbal remedies are not automatically safe for a damaged liver.

Treatment during pregnancy requires specialist planning because evidence and recommendations for antiviral use during pregnancy continue to develop. If pregnancy is possible, discuss timing and medicine safety before treatment.

Medicines commonly used for this include peginterferon alfa-2a . Which one suits you, if any, is a decision for you and your doctor.

- Vaccination against hepatitis A and hepatitis B if you are not immune
- Avoiding alcohol to reduce additional liver injury
- Reviewing medicines and supplements that could affect the liver
- Managing other conditions, such as diabetes or fatty liver
- Regular liver cancer screening if cirrhosis is present

Complications

Untreated chronic hepatitis C can gradually replace healthy liver tissue with scar tissue. This usually happens over years, and progression is not the same for everyone. Alcohol, HIV or hepatitis B coinfection, fatty liver, and some metabolic conditions can increase liver injury.

Cirrhosis can interfere with blood flow through the liver and reduce its ability to work. Complications can include fluid in the abdomen, swollen legs, internal bleeding from enlarged veins, and confusion caused by a buildup of toxins.

Cirrhosis also raises the risk of hepatocellular carcinoma, the most common type of liver cancer. Antiviral cure lowers this risk but does not remove it completely when advanced scarring is already present. This is why liver cancer screening may continue after successful

treatment.

Rarely, hepatitis C is linked to problems outside the liver, including kidney inflammation, abnormal immune proteins in the blood, certain skin conditions, and inflammation of blood vessels.

Prevention

There is no vaccine against hepatitis C. However, many infections can be prevented by avoiding contact with another person's blood.

Do not share needles, syringes, cookers, filters, water, or other drug-use equipment. Syringe service and harm-reduction programs can provide sterile supplies and testing without requiring someone to have stopped using drugs.

Choose tattoo and piercing services that use sterile, single-use needles and follow infection-control rules. Do not share razors, toothbrushes, nail clippers, or blood-testing equipment. Cover open cuts and clean blood spills using gloves and an appropriate disinfectant.

Condoms and other barriers can reduce sexual transmission risk, particularly when blood may be present or partners have other sexually transmitted infections. Hepatitis C does not require separate dishes, towels, toilets, or sleeping spaces.

If you have hepatitis C, do not donate blood. Tell healthcare workers before donating organs or tissue because eligibility is assessed under specific transplant programs.

Successful treatment does not provide immunity. You can become infected again after cure, so blood-safety measures remain important.

Living with it and what to expect

Hepatitis C often changes little from day to day, even while liver injury is developing. Regular follow-up matters because blood tests and liver assessments can detect changes that symptoms do not.

For most people, antiviral treatment is a short course rather than lifelong therapy. Side effects are often manageable, but they differ by medicine and person. Keeping a current list of medicines, supplements, and antacids helps prevent interactions.

After cure, tiredness and general wellbeing may improve, although not every symptom is caused by hepatitis C. Mild or moderate liver scarring may lessen over time. Cirrhosis may not

fully reverse, so ongoing specialist care and liver cancer screening can still be needed.

HCV antibodies usually remain positive for life after the infection has cleared. This does not mean treatment failed. An HCV RNA test, rather than another antibody test, is used to check for a current or new infection.

Most people can work, exercise, have relationships, and share a home normally. There is no need to avoid casual touch or shared meals. Pregnancy and breastfeeding are often possible, with individual planning around treatment timing and blood exposure.

When to get medical help

Arrange a routine appointment or hepatitis C test if you have had a possible blood exposure, previously shared drug-injection equipment, received an unscreened transfusion, or have been told that a liver test is abnormal. Testing is also appropriate if a current or former sexual or household contact has hepatitis C and blood exposure may have occurred.

Seek prompt medical advice if you develop new jaundice, increasing abdominal swelling, swollen legs, unusual bruising, persistent vomiting, or worsening confusion. These symptoms do not always mean severe liver damage, but they need assessment.

Call emergency services or go to an emergency department for:

These can be signs of bleeding or advanced liver complications and should not wait for a routine appointment.

- Vomiting blood
- Black, tar-like stools
- Severe confusion, unusual behaviour, or difficulty waking
- Fainting with signs of internal bleeding
- Rapid abdominal swelling with severe breathlessness

Common questions

Is hepatitis C really curable?

Yes. Direct-acting antiviral medicines cure most infections. Cure is confirmed when HCV RNA remains undetectable at least 12 weeks after treatment ends.

How did I get hepatitis C if I have never felt ill?

The infection often causes no symptoms for many years. Exposure may have happened

through shared injecting equipment, an old transfusion, an unsterile procedure, or another contact with blood. Sometimes the exact exposure is never identified.

Can I pass hepatitis C through kissing or sharing food?

No. It is not spread by kissing, hugging, coughing, shared food, dishes, or toilets. Transmission requires infected blood to enter another person's bloodstream.

Will my hepatitis C antibody test always be positive?

It usually remains positive after the infection clears or is cured. An HCV RNA test is needed to find out whether the virus is currently present.

Can hepatitis C come back after treatment?

True relapse after confirmed cure is uncommon, but a new infection is possible. People with continuing blood exposure may be offered repeat HCV RNA testing.

Can I drink alcohol if I have hepatitis C?

Alcohol can add to liver injury, especially when scarring is present. Avoiding alcohol is the safest choice. If stopping is difficult, confidential support and treatment are available.

Sources

- Centers for Disease Control and Prevention. Clinical Overview of Hepatitis C
- Centers for Disease Control and Prevention. Clinical Screening and Diagnosis for Hepatitis C
- AASLD-IDSA. HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C
- World Health Organization. Hepatitis C fact sheet
- National Institute of Diabetes and Digestive and Kidney Diseases. Hepatitis C
- US Preventive Services Task Force. Screening for Hepatitis C Virus Infection in Adolescents and Adults. JAMA. 2020;323(10):970-975