The three main types of hepatitis are known as hepatitis A, B, and C. Each is caused by a different virus. All three types can be acute, lasting for 6 months or less, and types B and C can be chronic, lasting for longer.

Each type has different characteristics and is transmitted in different ways, but symptoms tend to be similar.

Hepatitis A

In the United States (U.S.), 1,390 cases of hepatitis A were reported in 2015.

It is often mild, and most people make a full recovery, after which they are immune and therefore protected from the virus in the future. However, if it progresses, symptoms can be severe or life-threatening.

People in parts of the world with poor sanitation are particularly at risk of contracting HAV.

There are safe and effective vaccines that protect against this virus.

Hepatitis B

Hepatitis B can be transmitted when a person:

- has unprotected sexual intercourse with an infected person
- shares a needle with an infected person, often for illegal drug or steroid use
- has a tattoo created with unsterilized needles
- is accidentally pricked, for example, health workers dealing with sharp objects
- shares personal items, such as a toothbrush or razor, with an infected person
- is bitten by someone who is infected

An infected mother can pass the virus on to her infant when breast-feeding.

The liver of a person infected with hepatitis B swells. Severe damage can result.

HBV infection can become chronic. This can lead to complications, including scarring of the liver, or cirrhosis. It can also cause a type of cancer known as hepatocellular carcinoma.

In 2015, 887,000 deaths worldwide were linked to HBV, mostly as a result of complications such as these.

In the U.S., there were 3,370 reported cases of HBV, but the Centers for Disease Control and Prevention (CDC) estimate that the real figure may be around 21,900.

There is not currently a cure for HBV. However, the incidence rate has dropped in countries where the vaccine is available, and this vaccine is 95 percent effective against the infection.

There is a safe and effective vaccine that can protect against HBV.

Hepatitis C

HCV can lead to liver damage and swelling. Around 1 in 4 people with HCV get cirrhosis, and this can lead to liver cancer.

Donated blood is now tested for HCV, but people who received organ transplants or blood donations before testing became part of the donation process may be at risk.

Other at-risk groups include healthcare workers who are exposed to sharps, users of intravenous drugs, and infants born to mothers with HCV.

The number of cases of HCV in the U.S. rose nearly threefold between 2010 and 2015 when 2,436 cases were reported. However, the CDC estimate that 33,900 infections occurred in 2015, including those not reported.

Treatment

Some types and cases of hepatitis can heal without intervention, but sometimes it can progress to scarring of the liver, or cirrhosis.

Hepatitis A

There is no specific treatment for HAV. The doctor will advise the patient to abstain from alcohol and drugs during the recovery. Most patients with hepatitis A will recover without intervention.

Hepatitis B

A patient with HBV needs to rest and abstain completely from alcohol. The doctor may prescribe an antiviral agent called interferon, or other antiviral suppressive therapies.

Hepatitis C

A patient with hepatitis C will be prescribed antiviral agents, with or without ribavirin.

Some directed antivirals and combination therapies are now available to treat the hepatitis C virus based on its subtype. These treatments target viral replication and prevent the virus from being able to reproduce. When taken correctly, the cure rate is very high.

These medications can be expensive, and insurers may have specific criteria for treatment.

Symptoms

Many people with hepatitis experience either mild or no symptoms. When symptoms appear, they can do so from 15 to 180 days after infection. This applies to all types of hepatitis.

Acute hepatitis

The initial phase of hepatitis is called the acute phase. The symptoms are similar to mild flu, and may include:

Jaundice is a symptom of hepatitis.

- diarrhea
- fatigue
- loss of appetite
- mild fever
- muscle or joint aches
- nausea
- slight abdominal pain
- vomiting
- weight loss
- jaundice

The acute phase is not usually dangerous, but in certain people, it can result in acute liver failure and death. It may also progress to a chronic infection. This is most likely with HBV or HCV.

As the disease progresses, chronic hepatitis can lead to progressive liver failure, resulting in jaundice, swelling of the lower extremities, confusion, and blood in the feces or vomit.

The following may occur:

- dark urine
- hives
- itchy skin
- light-colored feces
- yellow skin, whites of the eyes, and tongue

Patient outcomes after the acute phase depend on various factors, especially the type of hepatitis. Some people will not know they have chronic hepatitis until liver failure occurs.

Diagnosis

As the symptoms of the different types of hepatitis are similar, the type and severity of hepatitis may only be diagnosed through laboratory tests.

A doctor will perform a physical examination and ask for a medical history to assess whether a patient has been exposed to a likely cause of hepatitis.

If a patient recently traveled abroad, they may have HAV. If they have had unprotected sex, they may have HBV.

If hepatitis is suspected, the following tests can confirm a diagnosis:

- Blood tests: These can detect whether the body is producing antibodies to fight the disease, and they can assess liver function by checking the levels of certain liver proteins and enzymes.
- Nucleic acid tests: For hepatitis B and C, an HBV DNA or HCV RNA test can confirm the speed at which the virus is reproducing in the liver, and this will show how active the disease is.
- A liver biopsy: This can measure the extent of liver damage and the possibility of cancer.
- Paracentesis: Abdominal fluid is extracted and tested, to identify the cause of fluid accumulation.
- Electrography: This measures the liver's stiffness by emitting sound waves.
- Surrogate markers: A type of blood test to assess the development of cirrhosis and fibrosis.

Treatment will depend on the diagnosis.

Causes

The three most common types of viral hepatitis are all caused by viral infections.

Hepatitis A is caused by consuming food or water infected with the hepatitis A virus (HAV), often while traveling abroad. The virus can also be transmitted through anal-oral contact during sex or by injecting drugs.

Hepatitis B is caused by the hepatitis B virus (HBV) and is spread through contact with infected blood, semen, and some other body fluids. It can be a sexually transmitted disease (STD).

Hepatitis C mostly results from percutaneous infection, occurring when the HCV virus gets under the skin. It is usually spread through injected narcotics, needle-stick injuries, and a lack of infection control in healthcare settings.

HCV cannot be caught from contact with feces, and sexual transmission is less common than in other types.

Alcohol, medicines, obesity, and chemical exposure do not cause types A, B, or C, but they may aggravate inflammation and make symptoms worse.

Prevention

Hepatitis can be dangerous and difficult to treat, so people are advised to take precautions against possible infection.

Preventing hepatitis A

Hepatitis A is mostly spread through infected food and water.

The following steps can help avoid infection, especially when traveling.

- Wash hands with soap after using the bathroom.
- Only consume food that has just been cooked.
- Only drink commercially bottled water, or boiled water if you're unsure of local sanitation.
- Only eat peel able fruits if you are in a location with unreliable sanitation
- Only eat raw vegetables if you are sure they have been cleaned or disinfected thoroughly.
- Get a vaccine for HAV before traveling to places where hepatitis may be endemic.

Preventing hepatitis B

To minimize the risk of transmission:

- Tell any sex partner if you are a carrier or try to find out if they carry the disease.
- Practice safe sex using condoms.
- Only use previously unused, clean needles.
- Do not share toothbrushes, razors, or manicure instruments.
- Only allow the use of well-sterilized skin perforating equipment, such as during a tattoo, piercing, or acupuncture.
- Have the HBV vaccination if you are at risk.

How to prevent hepatitis C

As this is often passed on through the transfer of infected bodily fluids, the following steps can help prevent HCV transmission:

- Do not share needles, toothbrushes, or manicure equipment.
- Make sure equipment is well-sterilized for any skin piercing.
- Consume alcohol with moderation.
- Do not inject illegal drugs.

Hepatitis A and C are curable, but hepatitis B is only preventable by vaccine. A cure is still under development.