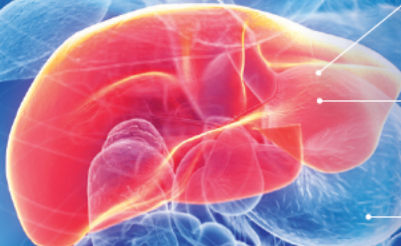
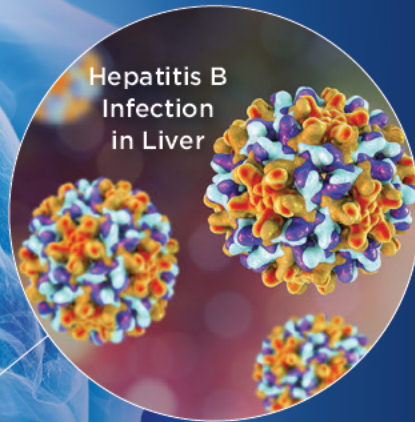


Hepatitis



Abdominal Anatomy



- Liver
- Spleen
- Stomach
- Kidney
(behind intestine)
- Colon
(Large Intestine)
- Small intestine

Hepatitis

The liver is the largest organ in the body. It sits in the right upper abdomen just under the right lung and behind the ribs. It is one of the body's most versatile organs because it performs so many functions all at the same time. The liver makes proteins, eliminates waste material from the body, produces and metabolizes cholesterol, stores and releases glucose energy, and metabolizes many drugs used in medicine. It produces bile that flows through bile ducts into the intestine to help digest food. This remarkable organ also has the ability to regenerate itself if it is injured or partially removed. The liver receives blood from two different sources the heart and the intestines. All of this blood flows through the liver and returns to the heart. It is no wonder that the ancient Chinese viewed the liver, not the heart, as the center of the body.

What Is Hepatitis?

Any type of inflammation in the liver is called hepatitis. This inflammation can be caused by many different things: drugs, viruses, bacteria, heredity, fatty tissue, and other causes.

What Are the Types of Viral Hepatitis?

- **Type A** - Previously known as infectious hepatitis, it can be contracted through contaminated water or food. During the acute infection, the patient's blood and body fluids are also infectious. Although some patients become acutely and desperately sick from this infection, most people tolerate it well and fully recover. No chronic infection occurs with this virus.
- **Type B** - Previously known as serum hepatitis. Patients are sicker initially with this very unpleasant virus and take longer to recover, some times several months. Furthermore, about 10 percent of patients progress into a state of chronic smoldering infection in the liver.



Blood tests are used to diagnose and follow the course of recovery.

A person can be infected by a contaminated needle or through sexual contact. Homosexual men, intravenous drug users, or persons who have sexual contact with these people are at an especially high risk for contracting this disease.

- **Type C** – This viral infection was previously known as non A non B hepatitis. In the past, it was transmitted mostly by blood transfusion. There are now good blood tests to check for this virus before blood is given. Most cases now occur in people who use contaminated needles for drug use. However, many cases are community acquired, meaning the physicians really don't know how they occur. It is difficult, but not impossible, to transmit this virus by unprotected sexual intercourse. Many people who acquire this infection go on to a chronic phase.
- **Other Viruses** – There are now types recognized D, E, and G viruses that can cause hepatitis. Infectious mono virus, CMV virus, and several other viruses are also capable of infecting the liver.

Are There Other Causes?

- **Alcohol** – Binge drinking of alcohol can inflict an acute hepatitis injury on the liver.
- **Drugs** – Certain drugs also can acutely injure the liver

in a few people who are hypersensitive or allergic to a particular medicine.

- **Autoimmune** – There are certain conditions similar to the disease called lupus erythematosus, which can produce injury to the liver. They are known as autoimmune disorders because the body's own antibody defenses seem to actively damage the liver.
- **Hereditary Conditions** – There are certain hereditary disorders, such as Wilson's disease, in which acute damage to the liver can occur.

Symptoms

As with other illnesses, symptoms of hepatitis can be severe, mild, or not present at all. It depends on how badly the liver is damaged. With mild viral hepatitis, slight fatigue may be the only symptom. When hepatitis is severe, the patient loses the taste for food and cigarettes, develops a heaviness in the right upper abdomen and, especially with acute B hepatitis, may have diarrhea and arthritis. The liver and even the spleen can enlarge. Jaundice then develops. The eyes and skin turn yellow, the urine dark, and the stool a putty white color.

Jaundice results when the yellow bile pigment, which normally flows through the bile ducts to the intestine, backs up and spills into the blood. Acute hepatitis can last from two weeks to several months. The patient often needs to be hospitalized in the early, acute phase of the illness.

Diagnosis

The physician often suspects hepatitis based on the patient's medical history and physical exam. Certain blood tests, however, are the best indicators of hepatitis, its causes, and its severity. Blood tests are used to follow the course of the infection through to recovery. Additional tests, such as ultrasound (sonography), are performed to study the bile ducts, gallbladder, and liver.

Occasionally a liver biopsy may be needed to provide information to the physician.

Treatment

No specific treatments are available for acute viral hepatitis. Fortunately, in most cases the body develops antibodies that fight and eventually kill the virus, allowing the liver to recover. For alcohol and drug induced hepatitis, the patient has to avoid the offending agent. The physician must make an accurate diagnosis, support the patient during the acute phase, and provide advice during recovery.

Recovery from viral hepatitis A and B results in protective antibodies so that the patient will not get these infections again and cannot transmit them to anyone else.

Chronic Phase

Some people progress to chronic hepatitis.

Here, the liver smolders with persistent inflammation. These patients need to be followed closely, usually by a specialist, to address the various problems that can arise from this condition. Effective treatment is available for many types of chronic hepatitis. Because some of these patients are infectious and can transmit the disease, they and their families must be educated about how to protect themselves.

Contagion and Spread

In the past, viral hepatitis had a well deserved reputation for being contagious. Contaminated water and poor sanitation provided easy transmission for these viruses. Today, much is known about how the viruses are transmitted so that prevention is usually possible.

However, infection still can occur through contaminated water or poor sanitation. In addition, during the acute phase, all body secretions saliva, tears, semen, urine, and especially blood are infectious. Sexual contact with someone who is infected is known to spread the virus. Also, if a patient is a carrier in the chronic phase, the infection may be spread through sexual contact.

Intravenous drug users who share needles are at an extremely high risk of contracting hepatitis, as are people who have multiple sexual partners. Because each hepatitis virus is different, it is always best to discuss this with a physician.

Vaccination

Passive (short acting) and active (permanent and long lasting) vaccines now are available against hepatitis A and B. People who travel to underdeveloped countries are encouraged to receive these vaccinations. The following high risk groups should also receive active immunization: health care workers, especially those who handle body fluids such as blood; people who have multiple sex partners; intravenous drug users. The American Pediatric Association now recommends that all infants and children be vaccinated.

Summary

Hepatitis, especially viral hepatitis, is a potentially serious disease with long term consequences. Most people infected with the virus, however, have a full recovery without any specific therapy. Current knowledge about the disease and advances in vaccination make prevention a realistic goal for everyone. Non viral types of hepatitis may often be controlled by treating the underlying causes. People who follow the advice of their physicians have every reason to expect a full and active life.

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