



Patient Information

Living with Liver Cancer

The liver is located behind the ribs on the right side of the abdomen. It removes harmful material from the body, produces substances that aid in digestion, and breaks down and stores fats and carbohydrates.

Liver cancer forms when abnormal cells in the liver begin to grow out of control. The most common form of liver cancer is called *hepatocellular carcinoma* (hep-uh-toe-sell-yuh-ler car-suh-no-muh).

Although it's possible to cure liver cancer in its early stages, the disease is usually discovered in later, less curable stages. Fortunately, recent advances in treatment options are helping people with liver cancer to live longer and have better quality of life.

How do I know if I'm at risk?

The most important risk factor for liver cancer is having liver disease, such as *cirrhosis* (suh-roh-sus) or infection with one of the *hepatitis* (hep-uh-tite-us) viruses (either B or C). In cirrhosis, healthy liver cells are damaged and replaced with scar tissue. This can be caused by alcohol abuse, drugs or other chemicals, viruses, or parasites.

Your risk of developing liver cancer also may be higher if you are male, are of Asian or Pacific Island ethnicity, have a family history of the disease, are older than age 60, have been exposed to certain toxins (such as aflatoxin, which comes from a fungus that grows on food), have diabetes, are obese, or smoke.

What are the warning signs?

Liver cancer symptoms usually appear in the later stages of disease and include

unexplained weight loss, loss of appetite, a feeling of fullness after a small meal, abdominal pain, fatigue and weakness, nausea and vomiting, fever, and itching. Other signs include *jaundice* (**jawn**-dis), a yellowing of the eyes and skin; swelling in the stomach area; an enlarged liver or spleen; and swollen veins on the stomach that can be seen through the skin. Worsening of hepatitis B or C infection or cirrhosis also may signal liver cancer.

What tests do I need?

Once liver cancer is suspected, your doctor will order imaging tests, such as a computed tomography, or CT, scan; magnetic resonance imaging, or MRI; or ultrasound. Ultrasound uses sound waves (transmitted through a wand that is moved over the skin) to reveal abnormalities inside the body. CT scanning uses a machine to take multiple x-rays while you lie still on a table. An MRI is similar to a CT scan, but it uses a magnetic field and radio waves instead of x-rays and usually takes longer. Before a CT or MRI, you may need to have a special dye injected to help the doctor see your organs more clearly. In addition to aiding in diagnosis, these imaging tests also can help determine how far the disease has progressed—an evaluation known as “staging.”

Other imaging tests used for liver cancer include *angiography* (an-jee-**ahg**-ruh-fee), in which a dye is injected and x-rays are taken of the liver's blood vessels, and *laparoscopy* (lap-uh-**rahs**-kuh-pee), in which a tube is inserted through a small cut in the abdomen and used to look at the liver. Before these tests, you'll be given drugs to

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numb the test area or make you sleepy. A biopsy, in which a doctor removes a small sample of tumor cells from your liver using a needle, is sometimes performed during a CT scan or laparoscopic procedure.

Your doctor also may order blood tests, especially one that checks for a substance called *alpha-fetoprotein* (**al-fuh-feet-oh-pro-teen**), or AFP. AFP levels often are high in people with liver cancer.

How can I avoid the problem?

One of the best ways to prevent liver cancer is to protect yourself from liver infection and damage. Talk to your doctor about getting vaccinated against hepatitis B. Avoid unprotected sex and illegal use of injected drugs, which can expose you to hepatitis B or C. Limit your intake of alcohol, and get treated if you have a problem with alcohol or drug abuse. If you have liver disease, work with your doctor to manage it. It also may help to quit smoking.

How is it treated?

If caught early on, liver tumors are removed surgically through a procedure known as resection. In some cases, liver transplantation—in which the diseased liver is removed and replaced with a healthy, donated liver—may be an option.

When surgery isn't possible due to extensive liver damage, other therapies can be used to shrink the tumor, relieve symptoms, or prolong life. *Radiofrequency ablation* (ray-dee-oh-**free**-kwun-see uh-**blay**-shun) uses needles to deliver extreme heat directly to the tumor. *Chemoembolization* (key-mo-em-buh-luh-**zay**-shun) involves blocking the blood flow to the tumor and injecting anticancer drugs into the liver.

Some people with advanced liver cancer may benefit from radiation therapy (expo-

sure of the body to high energy rays) or systemic *chemotherapy* (key-mo-**ther**-uh-pee), in which anticancer drugs are injected into the bloodstream. Generally, though, these therapies are used mainly to control symptoms.

Recent research has focused on drugs that target certain changes in cells related to the development of various cancers. One drug called Nexavar has been approved by the FDA to treat some liver cancers. People with liver cancer may be able to gain access to drugs being tested by participating in a clinical trial.

All the treatments used for liver cancer have unwanted effects, and many require long hospital stays, so your doctor should clearly explain the risks and benefits of each. You also may want to get additional opinions about your diagnosis and treatment options from other doctors.

When treatment no longer is working or desired, you and your doctor may decide that *hospice* (**hahs**-puhs) care is an option. Hospice care is a combination of services that focus on pain relief and symptom control for patients in the terminal stage of illness. It also provides support for patients and their loved ones.

For more information, visit the liver cancer page of the American Cancer Society (<http://www.cancer.org>). ●

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