What is liver cancer?

Liver cancer is a cancer that starts in the liver. It happens when cells in the liver start to change and grow out of control, crowding out normal cells. This makes it hard for the body to work the way it should. The liver makes bile to help the body use food. It also cleans the blood and helps the blood clot when you are cut.

Liver cancer cells can spread to other parts of the body. When cancer does this, it’s called metastasis. But even if a liver cancer spreads to your bones, it is still called and treated like a liver cancer, not bone cancer.
The liver

Ask your doctor to use this picture to show you where the cancer is.

Different kinds of liver cancer

Primary liver cancer
If a cancer starts in the liver, it is called primary liver cancer. There are many types of liver cancer. Some are very rare. Your doctor can tell you more about the type you have.

The most common type of liver cancer is called hepatocellular carcinoma. Also known as HCC. It starts in the cells that make up the liver.

Some rare types of liver cancer are:

- Angiosarcoma
- Hemangiosarcoma

These cancers start in the cells lining the blood vessels of the liver. They often grow quickly.

**Secondary liver cancer**

Most of the time when cancer is found in the liver it didn’t start there. It spread there (metastasized) from somewhere else in the body. Because the cancer has spread from where it started, it’s called a secondary liver cancer. So, cancer that started in the lung and spreads to the liver is called lung cancer with spread to the liver, not liver cancer. And this cancer is treated like lung cancer.

**Questions to ask the doctor**

- Why do you think I have cancer?
- Is there a chance I don’t have cancer?
- Would you please write down the kind of cancer you think I might have?
- What will happen next?

**How does the doctor know I have liver cancer?**

Liver cancer often doesn’t cause signs and symptoms until it has grown very large or spread.

Some symptoms of liver cancer are unplanned weight loss, don’t feel like eating, feeling full after a small meal, belly pain and swelling, and itchy, yellow skin. The doctor will ask you questions about your health and do a physical exam.
Tests that might be done

If signs are pointing to liver cancer, more tests may be done. Here are some of the tests you may need:

**Ultrasound:** For this test, a small wand is moved around on your skin. It gives off sound waves and picks up the echoes as they bounce off tissues. The echoes are made into a picture on a computer screen. This test is often the first test used to look at the liver.

**CT or CAT scan:** This scan uses x-rays to make detailed pictures of your body. It can show the size, shape, and place of any tumors in or near the liver.

**MRI:** This scan uses radio waves and strong magnets instead of x-rays to make detailed pictures. MRI scans can help tell if tumors in the liver are cancer. They can also be used to look at blood vessels in and around the liver. They can help find out if liver cancer has spread.

**Lab tests:** Blood tests can check a protein called AFP (alpha-fetoprotein). AFP is often very high in people with liver cancer. Other blood tests can also help find out how well the liver is working.

**Liver biopsy:** In a biopsy, the doctor takes out a small piece of tissue where the cancer seems to be. The tissue is checked for cancer.

There are many types of biopsies. Ask your doctor what kind you will need. Each type has risks and benefits. The choice of which type to use depends on your own case.

Sometimes MRI or CT scans clearly show liver cancer and a biopsy isn’t needed.

Questions to ask the doctor

- What tests will I need to have?
- Who will do these tests?
- Where will the tests be done?
- Who can explain the tests to me?
- How and when will I get the test results?
- Who will explain the test results to me?
- What do I need to do next?
How serious is my cancer?

If you have liver cancer, the doctor will want to find out how far it has spread. This is called staging. The stage describes the growth or spread of the cancer through the liver. It also tells if the cancer has spread to other organs of your body that are close by or far away. Your doctor will want to find out the stage of your cancer to help decide what type of treatment is best for you.

Staging the cancer

Your cancer can be stage 1, 2, 3, or 4. The lower the number, the less the cancer has spread. A higher number, like stage 4, means the cancer has spread outside the liver.

Doctors may also group liver cancers more simply, based on whether or not they can be entirely cut out (resected). Resectable means can be removed by surgery.

Be sure to ask about your cancer stage and what it means.

Questions to ask the doctor

• Do you know the stage of the cancer?
• If not, how and when will you find out the stage of the cancer?
• Would you explain to me what the stage means in my case?
• Based on the stage of the cancer, how long do you think I’ll live?
• What will happen next?

What kind of treatment will I need?

There are many ways to treat liver cancer, but the main types of treatment are:

• Surgery
• Tumor ablation
• Embolization
• Radiation
• Immunotherapy
• Targeted therapy
• Chemotherapy
Many times more than one kind of treatment is used.

The treatment plan that’s best for you will depend on:

- The stage of the cancer
- How well your liver is working
- The chance that a type of treatment will cure the cancer or help in some way
- Your age
- Other health problems you have
- Your feelings about the treatment and the side effects that come with it

**Surgery for liver cancer**

Surgery is the only way to try to cure liver cancer. Surgery can be done to take out the part of the liver with the tumor or to do a liver transplant. Talk to the doctor about the kind of surgery planned and what you can expect.

**Side effects of surgery:** Any type of surgery can have risks and side effects. Be sure to ask your cancer care team what you can expect. If you have problems, let your doctors know. Doctors who treat liver cancer should be able to help you with any problems that come up.

**Ablation for liver cancer**

Ablation is a treatment that destroys small liver tumors without taking them out. There are a number of ways to do this, such as heating the tumor with radio waves or microwaves, freezing the tumor, or killing the tumor by putting alcohol in it. Talk to the doctor about the planned treatment and what you can expect.

**Embolization for liver cancer**

Some patients with tumors that cannot be removed by surgery can have embolization. It can be used for tumors that are too large to be treated with ablation. Embolization can also be used with ablation. Substances are injected into the tumor or nearby blood vessels, to try to block or reduce some of the blood supply to the cancer. This causes the cancer cells to die.

There are different types of embolization procedures (arterial embolization, chemoembolization, and radioembolization). But this treatment may not be a good
choice for some patients whose liver has been damaged by diseases like hepatitis or cirrhosis.

**Side effects of embolization:** Possible side effects after embolization include abdominal (belly) pain, fever, nausea, infection in the liver, gallbladder inflammation, and blood clots in the main blood vessels of the liver. Serious complications are not common, but they are possible.

**Radiation treatments**

Radiation uses high-energy rays (like x-rays) to kill cancer cells. There are different kinds of radiation.

One kind, called **external beam radiation** can be aimed at the liver from a machine outside the body.

Another type of radiation treatment uses radiation and embolization (called **radioembolization**). It’s done by using a needle to put small radioactive beads into the hepatic artery, a large blood vessel in the liver, so the radiation is very close to the cancer.

**Side effects of radiation treatments:** If your doctor suggests radiation treatment, ask what **side effects** might happen. Side effects depend on the type of radiation that’s used. The most common side effects of radiation are skin changes where the radiation is given and feeling very tired. Most side effects get better after treatment ends. Some might last longer. Talk to your doctor about what you can expect.

**Chemo**

Chemo is the short word for chemotherapy – the use of drugs to fight cancer. The drugs may be given into a vein. These drugs go into the blood and spread through the body. Chemo is given in cycles or rounds. Each round of treatment is followed by a break. Chemo may be used to treat liver cancer, but it doesn’t work as well as other treatments for liver cancer.

A type of embolization that uses chemotherapy is known as **chemoembolization**. Tiny beads carrying chemo drugs are put into an artery to reduce blood flow to the tumor and also to put the chemo very close to the cancer.

**Side effects of chemo:** Chemo can make you feel very tired, sick to your stomach, and may cause your hair to fall out. But these problems go away after treatment ends. There
are ways to treat most chemo side effects. If you have side effects, talk to your cancer care team so they can help.

**Targeted therapy for liver cancer**

Targeted therapy uses drugs, different from chemotherapy, to treat certain types of liver cancer. These drugs affect mainly cancer cells and not normal cells in the body. They may work even if other treatment doesn’t. They come as pills that you can take at home. These drugs have different side effects from chemo.

**Immunotherapy**

Immunotherapy is the use of medicines that help a person’s own immune system find and destroy cancer cells. One type of immunotherapy that is used to treat liver cancer is given into a vein.

**Side effects of immunotherapy:** Immunotherapy can make you feel tired, sick to your stomach, or cause fever, chills, and rashes. Most of these problems go away after treatment ends.

Some side effects though are more serious than others. Talk to your doctor about what you can expect.

**Clinical trials**

Clinical trials are research studies that test new drugs or other treatments in people. They compare standard treatments with others that may be better.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials. See Clinical Trials to learn more.

Clinical trials are one way to get the newest cancer treatment. They are the best way for doctors to find better ways to treat cancer. If your doctor can find one that’s studying the kind of cancer you have, it’s up to you if you want to take part. And if you do sign up for a clinical trial, you can always stop at any time.

**What about other treatments I hear about?**

When you have cancer you might hear about other ways to treat the cancer or treat your symptoms. These treatments may be vitamins, herbs, special diets, and other
things. You may want to know more about them.

Some of these are known to help, but many have not been tested. Some have been shown not to help. A few have even been found to be harmful. Talk to your doctor about anything you’re thinking about using, whether it’s a vitamin, a diet, or anything else.

**Questions to ask the doctor**

- What treatment do you think is best for me?
- What’s the goal of this treatment? Do you think it could cure the cancer?
- Will treatment include surgery? If so, who will do the surgery?
- What will the surgery be like?
- Will I need other types of treatment, too? What’s the goal of these treatments?
- What side effects could I have from these treatments?
- What can I do about side effects that I might have?
- Is there a clinical trial that might be right for me?
- What about special vitamins or diets that friends tell me about? How will I know if they are safe?
- How soon do I need to start treatment?
- What should I do to be ready for treatment?
- Is there anything I can do to help the treatment work better?
- What’s the next step?

**What will happen after treatment?**

You'll be glad when treatment is over. For years after treatment ends, you still will need to see your cancer doctor. Be sure to go to all of these follow-up visits. Your doctor will ask about any symptoms that you might have and you will have exams, blood tests, and maybe other tests done to see if the cancer has come back.

At first, your visits may be every 3 to 6 months for the first 2 years, then every 6 to 12 months. The longer you’re cancer-free, the less often the visits are needed.

Some treatments may not cure your cancer. You might need to keep getting treatment and care. From time to time tests will be done to see how your treatment is working.

Having cancer and dealing with treatment can be hard, but it can also be a time to look at your life in new ways. You might be thinking about how to improve your health. Call us at 1-800-227-2345 or talk to your cancer care team to find out what you can do to
feel better.

You can’t change the fact that you have cancer. What you can change is how you live the rest of your life.  

For connecting and sharing during a cancer journey

Anyone with cancer, their caregivers, families, and friends, can benefit from help and support. The American Cancer Society offers the Cancer Survivors Network (CSN), a safe place to connect with others who share similar interests and experiences. We also partner with CaringBridge, a free online tool that helps people dealing with illnesses like cancer stay in touch with their friends, family members, and support network by creating their own personal page where they share their journey and health updates.

Hyperlinks

5. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/targeted-therapy/side-effects.html
8. csn.cancer.org/
9. www.caringbridge.org/
10. www.cancer.org

Words to know

Ablation (a-BLAY-shun): Treatment to destroy a tumor. Ablation may be done with drugs, radio waves, heat, cold, alcohol, or microwaves to treat liver cancer.

Angiosarcoma (AN-jee-o-sar-KO-muh): A type of cancer that starts in cells that line blood vessels or lymph vessels.
**Biopsy** (BY-op-see): Taking out a small piece of tissue to see if there are cancer cells in it.

**Hemangiosarcoma** (hee-MAN-jee-oh-sar-KOH-muh): Cancer that starts in the cells that line blood vessels.

**Hepatocellular carcinoma** (heh-PA-toh-SEL-yoo-ler CAR-sih-O-muh): The most common type of liver cancer. It starts in liver cells.

**Hepatectomy** (HEH-puh-TEK-toh-mee): Surgery to take out all or part of the liver.

**Metastasis** (muh-TAS-tuh-sis): Cancer cells that have spread from where they started to other places in the body.

**Radiation** (RAY-dee-A-shun): Use of high-energy rays (like x-rays) to kill cancer cells.

**Radioembolization** (RAY-dee-oh-EM-boh-lih-ZAY-shun): A type of radiation therapy used to treat liver cancer with tiny beads of radiation that are put right into the hepatic artery, a big blood vessel in the liver.

**How can I learn more?**

We have a lot more information for you. You can find it online at www.cancer.org (www.cancer.org). Or, you can call our toll-free number at 1-800-227-2345 to talk to one of our cancer information specialists.

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