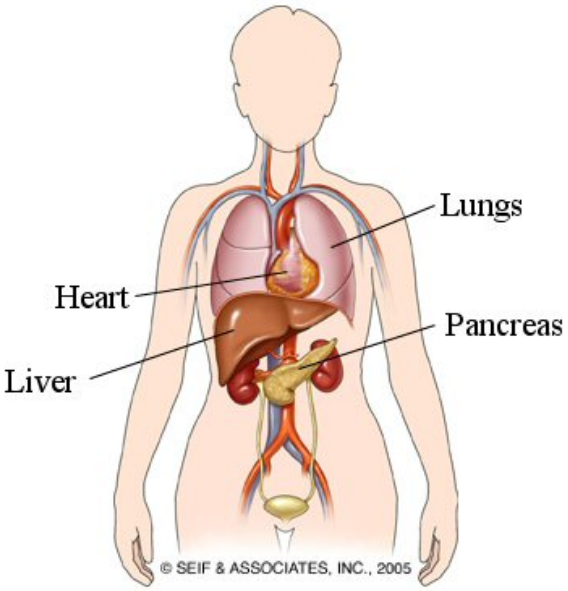
Liver Cancer

Cells divide to form new cells when the body needs them. That happens in the liver, just as it does in other organs. Sometimes, the cells divide too rapidly. Old cells do not die off, and the process gets out of control. A growth (*tumor*) forms. That is how liver cancer starts.

The liver is an important organ of the body. It is located on the upper right side of the belly (*abdomen*), just below the ribs. It is the largest organ in the body. In an adult man, it is about the size of a football. The liver stores sugar and iron. It also cleans (*filters*) harmful substances out of the blood.



CAUSES

Scientists do not know exactly why cells start to divide rapidly in the liver to form a tumor. It is known that certain behaviors and conditions (risk factors) make liver cancer more likely to develop. They include:

- Being male. Men older than 50 have liver cancer more often than other people do.
- Having scarring of the liver (*cirrhosis*).
  - This occurs when liver cells are damaged and replaced with scar tissue.
  - Heavy drinking of alcohol for many years can cause cirrhosis, as well as being infected with the hepatitis B or C virus (HBV or HCV). HBV and HCV are spread through blood and sexual contact.
  - Almost all cases of liver cancer in the United States occur in people who have cirrhosis first.
- Having certain liver diseases:
  - Hemochromatosis. This disease causes too much iron to be stored in the liver.
  - Autoimmune hepatitis. In this disease, the body's immune system turns against the liver.
  - Wilson's disease. This disease happens when copper builds up in the liver.
- Having diabetes, particularly if you also drink alcohol heavily or have chronic viral hepatitis.
- Being overweight (*obese*).
- Exposure to alfatoxins. These are substances made by certain types of mold. They can form on peanuts, corn, wheat, soybeans and rice. This is not a common cause of liver cancer in the United States and Europe where foods are tested for alfatoxins.

SYMPTOMS

Often times, liver cancer often has few symptoms in the beginning. Sometimes, there are none. As the cancer grows, symptoms may include:

- Weight loss without dieting.
- Loss of appetite.
- Feeling sick to your stomach.
- Feeling very weak and tired.
- Pain on the right side of the belly (*abdomen*).
- Feeling full or bloated.
- Running a fever for no reason.
- The skin or eyes become yellow in color (*jaundice*).
- Dark-colored urine.

DIAGNOSIS

Your caregiver may suspect that you have liver cancer based on your symptoms and your physical exam. Other

tests will likely be necessary. These may include:

- Blood tests, including a test called Alpha-fetoprotein (AFP). The blood contains more of this protein if someone has liver cancer.
- Imaging tests may be able to detect cancer or a tumor. These include CT scan, MRI scan, or ultrasound.
- Liver biopsy. Using medicine to numb your skin, a specialist can insert a needle into the liver and remove some cells. These cells are examined under a microscope to determine if cancer is present. This is the best way to be certain of the diagnosis.

TREATMENT

Liver cancer can be treated many ways. The type of treatment will depend on:

1. The stage of the cancer.
2. Your age and overall health.
3. The condition of the liver. This means how well it is working and whether cirrhosis is present.

Treatments can be used alone or in combination. Options include:

- Surgery.
  - The part of the liver that has cancer may be removed.
  - The whole liver may be removed. It would be replaced with a healthy liver (*liver transplant*).
- Radiation. High-energy X-rays kill the cancer cells.
  - External radiation beams rays from a machine outside the body.
  - Internal radiation uses tiny spheres (like beads) that are put into the body. They give off radiation.
- Chemotherapy. This treatment uses drugs that kill cancer cells. Options include:
  - Intravenous chemotherapy. Drugs are put into the blood to travel through the body.
  - Targeted chemotherapy. This uses a drug that kills liver cancer by blocking the cancer's blood supply.
  - Chemoembolization. Drugs are injected directly into the liver to kill cancer cells.
- Cryoablation. This involves killing the cancer cells by freezing them.
- Radiofrequency ablation. This procedure kills the cancer cells by heating them with an electric current.

HOME CARE INSTRUCTIONS

- Learn as much as you can about liver cancer. It is important to be an informed patient.
- Work closely with your caregivers. Fighting cancer takes a team approach.
- Take medications for pain only as prescribed by your caregiver. Follow the directions carefully. Ask before taking any over-the-counter drugs. Be aware that medicines containing acetaminophen (such as Tylenol) can add to liver damage.
- Pay attention to what you eat. Nutrition is an important part of recovering from liver cancer. Having this cancer can take away your appetite. So can some of the treatments for it. You might need to limit salt. It is also important to get the right amount of protein. Ask your healthcare provider for advice. Or, talk with a nutritionist.
- Consider joining a support group. Learning to live with a serious health problem, such as liver cancer, can be difficult. Friends and family can help. Many people also find it helpful to talk with others who are going through the same things you are. Ask your caregiver for a list of groups in your area.
- Get rest.
- **Do not** drink alcoholic beverages at all.
- Get vaccinated against hepatitis A and B. There is no vaccine for hepatitis C. If you are considered at risk for these diseases, get tested.

SEEK MEDICAL CARE IF:

- You cannot eat because you feel sick to your stomach.
- Your abdomen or legs start to swell. Fluid might be building up.
- You feel weaker or more tired than usual.
- Pain gets worse.
- You develop a fever of more than 100.5º F (38.1º C).

SEEK IMMEDIATE MEDICAL CARE IF:

- Pain in your abdomen increases suddenly.
- You have nausea, vomiting or diarrhea that does not go away.
- You feel confused.
- You feel very sleepy during the daytime.
- You have any bleeding that does not stop quickly.
- You develop a fever of more than 102.0º F (38.9º C).

Document Released: 05/06/2010
ExitCare® Patient Information ©2011 ExitCare, LLC.