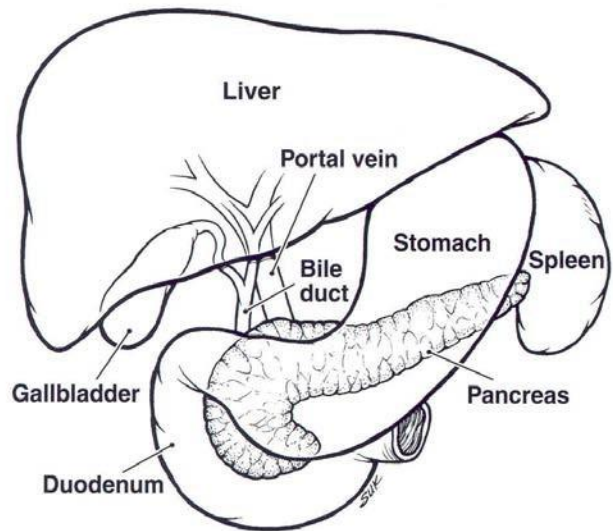


Liver Cancer

Primary liver cancer begins from liver tissue. This is different than secondary liver cancer, where cancer spreads to the liver from another part of the body.

Facts about liver cancer:

- Liver cancer is not common in the United States.
- Men are diagnosed more often than women.
- People are commonly diagnosed at 40 years of age and older.
- It is the 4th most common cancer worldwide and the 3rd leading cause of cancer-related deaths. (National Cancer Institute)



The liver is in the upper abdomen near the stomach, gallbladder and pancreas.

The Liver

The liver is one of the largest organs in the body. It is located in the upper right part of the abdomen and under the ribcage. The liver has many important functions. These include:

- Helps digest food
- Filters toxins out of the body
- Stores sugar which the body uses as energy

Types of Liver Cancer

- Hepatocellular carcinoma (HCC) – This is the most common type of primary liver cancer.
- Fibrolamellar HCC – This is a rare cancer. It has a higher chance of responding well to treatment than other types of liver cancer.
- Cholangiocarcinomas – This cancer begins in the bile duct (a thin tube that carries bile to the gallbladder). 1-2 of every 10 cases of liver cancer develop from the bile duct.
- Angiosarcomas and hemangiosarcomas – These cancers begin in blood vessels in the liver.
- Hepatoblastoma - A very rare liver cancer that most often is found in children.

Risk Factors

Liver cancer is most likely caused by many factors. Any chronic liver injury (such as cirrhosis) can increase the chance of developing liver cancer.

Causes of cirrhosis include:

- Alcohol abuse
- Autoimmune diseases of the liver
- Exposure to foods that contain aflatoxin. This is a poison from a fungus that can grow on foods. These foods include grains and nuts that have not been stored properly.
- Hepatitis B and C liver infection
- Too much iron in the body (called hemochromatosis)

Signs and Symptoms

- Abdominal pain or tenderness, especially of the right upper abdomen
- Easy bruising or bleeding
- Yellow skin and/or eyes
- Enlarged abdomen
- Weight loss for no known reason

Staging and Liver Cancer

After cancer is diagnosed, other tests and exams are done to determine the extent of the cancer. This process is called staging. Staging the tumor determines the size of the tumor and if the tumor has spread. Tests used to determine staging may include:

- Biopsy (a small sample of tissue)
- Computerized tomography (CT) scan
- Magnetic resonance imaging (MRI)
- Blood work is drawn to check liver function tests and a tumor marker called serum alpha fetoprotein (AFP).

There are many systems for staging HCC. A staging system is often used to help determine the prognosis. In the case of HCC, the process is very complex because both cancer and any underlying liver disease (such as cirrhosis) will be considered.

Treatment Options

Treatment is determined by how advanced the cancer is and overall liver function.

- Surgery – Reserved for people with potential cure where part of the liver or the entire liver is removed (liver transplant). Surgery can be done if the cancer has not spread
- Radiation therapy – Targets the cancer area with radiation rays or radiation therapy to the entire liver. Can be limited if liver cirrhosis or other liver disease is not well controlled.
- Ablation – Chemotherapy and/or other drugs are delivered directly to the liver to ‘ablate’ or

destroy cancer cells. Some methods include TACE (transarterial chemo embolization) and RFA (radiofrequency ablation).

- Chemotherapy – Drugs given by vein or in pill form to fight cancer cells.

Your doctor may suggest more than one treatment. A team of doctors including a surgeon, radiation oncologist and medical oncologist are often involved in the treatment plan.

Living with Liver Cancer

Regular follow-up visits with your doctor are important while receiving treatment. They are also important after completing treatment. Having regular follow-up visits will help detect any new cancer. Early detection helps with early treatment.

Cancer changes your life in many ways. Patients and their families often feel shock, anger, sadness, fear, frustration and confusion when faced with cancer. Joining support groups may help ease some of the stress and concerns about living with liver cancer.