Screening for Liver Cancer in People with Cirrhosis

The liver is the largest internal organ in the human body (Figure 1). It helps you digest food and get rid of toxins from the body. The liver also stores energy in the form of glucose and makes proteins. You cannot live without a liver.

Figure 1. Liver

Cirrhosis

Cirrhosis is a condition in which scar tissue replaces healthy liver tissue. Liver scarring happens every time your liver tries to repair itself from injury. That injury can be from diseases (like viral infections), too much alcohol use, fat on the liver (fatty liver disease) or some inherited conditions. If too much scar tissue develops, the liver cannot function normally. In very severe cases, liver failure can happen.

Some people with cirrhosis have no symptoms. Other people may have some of the following symptoms:

- Fatigue (tiredness)
- Easily bleeding or bruising
- Loss of appetite
- Nausea
- Swelling in the legs, feet or ankles
- Yellow-colored skin (jaundice)
- Fluid buildup in the belly (ascites)
Liver cancer

Cancer begins when healthy cells change and grow out of control (Figure 2). These unhealthy cells form a mass (tumor). Primary liver cancer is cancer that starts in the liver.

Figure 2. Liver cancer

There are 4 stages of liver cancer:

- **Very early stage:** The tumor is smaller than 2 centimeters (cm).
- **Early stage:** There are no more than 3 tumors. Each tumor is smaller than 3 cm.
- **Intermediate stage:** There is a single large tumor or there are many tumors. The tumor has not spread to the blood vessels (veins and arteries).
- **Advanced stage:** The tumor has spread to blood vessels or other parts of body.

**Hepatocellular carcinoma**

Hepatocellular carcinoma, or HCC, is the most common type of liver cancer. 9 out of every 10 people who have liver cancer have HCC. Cirrhosis is one of the most common risk factors for HCC.

People with HCC do not always have symptoms. The only way to find HCC early is through screening.

**Screening for HCC**

Screening means testing people for early stages of a disease before they have symptoms. Cirrhosis is one of the leading causes of HCC. Finding and treating HCC early saves lives. Screening for HCC helps the physician find the tumor in the early stages before symptoms start. Early treatment can kill the tumor cells and prevent the tumor from spreading.

The care team uses an ultrasound test to screen for HCC. An ultrasound uses sound waves to take pictures of different organs in the body. An ultrasound of the liver does not hurt. No needles or other objects go into the body.
What to do

If you have cirrhosis, there are things you can do to prevent or catch HCC early. People with cirrhosis should:

- Get a screening test for HCC every 6 months.
- See a liver specialist (hepatologist) or a digestive system specialist (gastroenterologist).
- Stop all alcohol use.
- Keep a healthy weight.
- Get hepatitis B and C vaccinations.
- Avoid non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil®, Motrin®), naproxen (Aleve®), diclofenac (Voltaren®). You may take acetaminophen (Tylenol®) only as instructed by your physician.
- Talk with your physician before starting any medications or supplements.

If you have any questions about cirrhosis and HCC screening, please ask your physician.