GENERAL INFORMATION

Until just a few years ago, if someone had a cancer in the liver that had started or traveled there (metastasized) from elsewhere in the body, the chances of cure were thought to be hopeless because it was too dangerous to remove the portion of the liver with the cancer in it. Now, this is no longer true. A number of new techniques have made it possible to remove with intent to cure up to three-fifths of the cancerous liver and to do it without too much risk.

COMMON PATIENT HISTORY

- There is a history of cancer elsewhere in the body (specifically the large bowel) that was removed but now has spread to the liver.
- There is a vague pain in the upper abdomen.
- A new cancer just developed in a normal liver or in a liver with cirrhosis.

COMMON SIGNS AND SYMPTOMS

- Pain in the right part of the upper abdomen.
- Some new abnormalities in the liver test results.
- Worsening or some additional abnormalities in a patient with chronic hepatitis.

DIAGNOSIS

A person who has the above history and symptoms should have some or all of the following tests done to see whether liver metastases are present.

- You will have an examination of your blood, urine, heart (EKG), and lungs (chest x-ray).
- Ultrasound: Harmless sound waves are aimed at the area of your liver. The sound waves bouncing back (the echoes) from this area are seen as a picture on a screen. This is a convenient and painless way to examine the liver.
- CT scan (computed tomography scan): Special x-rays are taken as very thin slices through the area of the upper abdomen. This makes it possible to see the fine details in the liver.
- MRI (magnetic resonance imaging): No x-rays are used with this technique. Instead, it is done with harmless magnetic fields and radio waves. A computer develops the pictures to show organs from several angles. It is especially valuable for examining blood vessels in relation to tissue.
- Liver biopsy: This can determine whether any abnormality seen with other studies is really cancer. The skin over the tumor area is made numb and a special fine needle is used to go through the numbed skin and into the suspected area in the liver. A tiny piece of the suspected tissue (a biopsy) is obtained for laboratory examination.
- Bone scan: A tiny amount of a harmless radioactive solution is injected into your vein, which then circulates throughout your entire body and attaches itself to any part of a bone that has something wrong with it. You will lie on a table as a special machine passes over your entire body taking a series of photographs (a scan) of all the bones from your skull to your toes. A specialist then examines the scan, looking for any abnormalities.

It has been determined that you have cancer in your liver. There is no evidence of cancer elsewhere in your body.

TREATMENT

The cancer in your liver is so close to important structures that it cannot be removed without very great risk or leaving you with too little healthy liver. It is possible, however, to kill the tumor where it sits by freezing it. The body can then slowly absorb this killed cancer tissue.

After taking all factors into consideration, it is recommended that you have an operation to freeze these cancers.

PREOPERATIVE PREPARATION

- In addition to your other tests, special attention will be given to your heart (EKG), lungs (chest x-ray), and kidneys.
- Do not eat or drink anything for 8 hours before the operation.

OPERATION

- Several patterns of cancer in the liver are shown that are suitable for treatment by freezing (Figs. 1–3).
The abdomen will be opened, and the specially designed freezing needles will be guided to the metastases with the help of ultrasonography.

The operation takes about 3 to 4 hours.

**POSTOPERATIVE CARE**
- You will be taken to a recovery room and observed. When your blood pressure, pulse, and breathing are stable, you will be taken to a regular hospital room.
- A thin plastic tube coming out of your nose goes down to the stomach to keep it empty until it starts working again.
- Pain will be controlled with medicine.
- You should be able to go home in several days.
- Arrangements will be made for your pain medicines, office visit, and stitch removal.
- As with any operation, complications are always possible, some of them serious. With your type of operation, complications can include bleeding, infection, pneumonia, heart problems, jaundice, bowel obstruction, wound infection, liver failure, and possibly others.

**HOME CARE**
- You may walk about as you wish, even climb stairs, but don’t overdo things.
- Take the medicines prescribed for you.
- Your diet can be as you tolerate it.
- Include plenty of roughage and liquids in your diet to help prevent constipation.
- You will be instructed on showering or bathing.
- Do not drive a car until we discuss it first during your follow-up office visit.

**CALL OUR OFFICE IF**
- You develop any unusual signs or symptoms.
- The incision becomes red or swollen, or there is drainage from it.
- You develop a temperature higher than 100°F.
- You have any questions.