What You Need to Know About Liver Cancer Surgery

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Important Information on Liver Cancer Surgery

The best possibility of a cure for liver cancer is with surgery, but surgery is only possible if the cancer is caught early enough.

Who Can Get Liver Cancer Surgery?

The goal of surgery is to remove the part of the liver containing the cancerous tumor. Surgery is best suited for tumors which have not grown into the blood vessels.

In cases where the liver cancer has not metastasized, surgery is an option if the liver is functioning well. If liver cancer has metastasized, it means it has spread from the liver to other parts of the body.

People with liver cirrhosis are not candidates for surgery because there may not be enough viable liver tissue.

Localized tumors are resectable and can be removed by surgery. Unfortunately, only a small number of people with liver cancer have resectable tumors.

Some localized tumors are unresectable even though cancer has not spread to lymph nodes or distant organs and tissues. They are considered unrespectable because:

- The liver may not be healthy
- Has spread all through the liver
- The tumor is too close to vital arteries, veins and bile ducts.

Advanced stage liver cancer that has spread through to organs, tissues and lymph nodes cannot be treated with surgery.

Liver Cancer Surgery Options

If liver cirrhosis and cancer do not damage your liver or has not spread beyond your liver, your doctor will recommend surgical treatment.

Partial Hepatectomy

Because you need your liver, it is impossible to remove it completely. Your doctor will, therefore, removal of part of your liver, with a surgical procedure called a partial hepatectomy.

Only the diseased part of the liver is removed, and the remaining part must be healthy enough to make up for the tissue that removed.

After surgical resection, the remaining part must take over the functions of the entire liver. The good news is that the liver will eventually grow back to its regular size within a few weeks.

A partial hepatectomy may cause side effects, including:

- Pain
- Fatigue
- Weakness
- Temporary liver failure
- Infection

Liver Transplant

If your cancer has not spread outside the liver, a liver transplant can be done, but there must be a viable organ available and the tumor must not exceed a certain size.

For you to be eligible for a liver transplant, a single tumor cannot be more than 5 cm. If there is more than one tumor, they cannot be bigger than 3 cm.

A liver transplant is not always an option because the number of donors is limited.

But if you end up having a transplant, you will be watched closely after the surgery.

Your medical team will watch you closely to monitor for signs that your body is rejecting your new liver. Medication can help to minimize the chances of rejection.

Anti-rejections are not without side effects. These may include:

- High blood pressure
- Facial swelling
- Increased body hair

There is also the potential for serious complications, including infection or death.

Radiofrequency Ablation

Radiofrequency ablation (RFA) is the use of heat delivered by radio waves to kill cancerous cells.

Your doctor will recommend this surgical procedure if you have several small tumors where surgical resection might be too invasive. This option is also considered after surgery if small tumors remain.

This procedure is done by inserting a probe into the tumor and then sending an electrical current through the tumor to kill the cancer cells.

RFA is a safe procedure, but side effects and complications are possible. Side effects and complications are dependent on the area that is ablated.

Side effects are rare, but may include soreness and bruising at the treated location and electrical burns on the skin or other treated areas. Great care needs are taken when placing radio-frequency needles and using the electronic current.

Cryosurgery

Cryosurgery can treat liver cancer that has not spread. It is a better option for people who cannot endure a partial hepatectomy due to other health issues.

Cryosurgery involves the use of extreme cold produced by liquid nitrogen to destroy abnormal cells. When treating tumors in the body, cryosurgery involves the use of a cryoprobe placed in contact with the tumor.

The doctor will use an MRI or ultrasound to guide the cryoprobe and deliver liquid nitrogen to various parts of the tumor to destroy the cells. The dead cells eventually thaw and are naturally absorbed by the body.

Cryosurgery may cause complications, including damage to bile ducts or blood vessels, which may lead to heavy bleeding and/or infection.

Laparoscopic Liver Surgery

Minimally laparoscopic liver resection might be an option for some people based on tumor type and location. With this procedure, a surgeon makes a few incisions and then uses laparoscopic tools to remove tumors.

A minimally invasive approach results in less post-operative pain, faster recovery and less time in the hospital.