

Liver resection is a surgery in which part of the liver is removed. This is usually performed when the liver is cancerous or when non-cancerous growths are present in the liver.

Who needs a liver resection?

Patients may require a liver resection for various reasons, including:

- Liver cancer
- Non-cancerous growths in the liver that may potentially become a cancer
- Tumour deposits from cancers of the other organs
- Infection of the liver
- Complex liver cysts

Surgical Specialists Centre
 NUH Medical Centre, Zone B, Level 15, 15a
 Email: surgical_specialists_centre@nuhs.edu.sg

University Surgical Centre
 Kent Ridge Wing, Zone D, Level 5, D05-02
 Email: usc@nuhs.edu.sg

Appointment Line: (65) 6772 2002

Opening Hours:
 Monday to Friday: 8:30am - 5:30pm
 Closed on Sat, Sun & Public Holidays



National University Hospital
 5 Lower Kent Ridge Road, Singapore 119074
 Website: www.nuh.com.sg

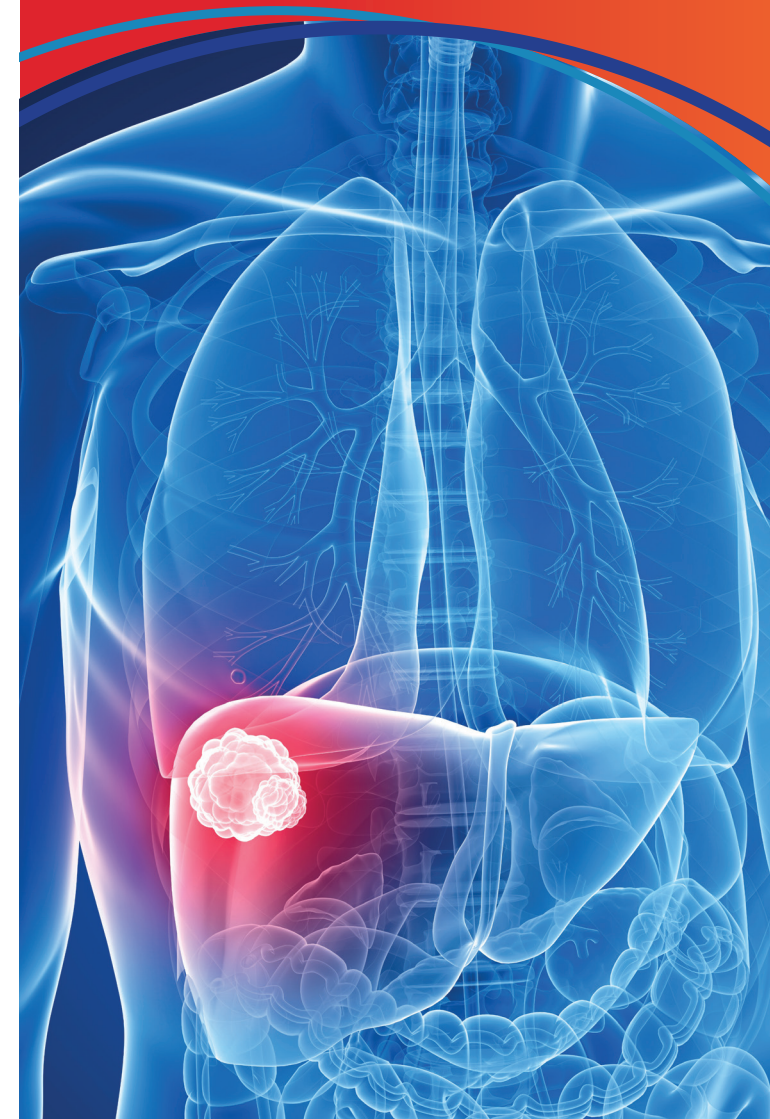
Company Registration No. 198500843R

Information is correct at time of printing (July 2021) and subject to revision without prior notice. The information provided in this publication is meant purely for educational purposes and may not be used as a substitute for medical diagnosis or treatment. You should seek the advice of your doctor or a qualified healthcare provider before starting any treatment or if you have any questions related to your health, physical fitness or medical conditions.

Copyright (2021). National University Hospital. All Rights reserved. No part of this publication may be reproduced without permission in writing from National University Hospital.



Liver Resection



What is usually done before a liver resection?

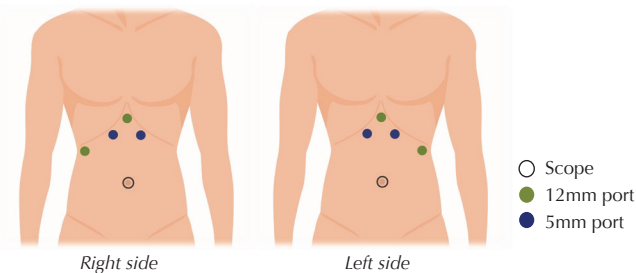
Before patients undergo a liver resection, there are a few conditions which he/she needs to fulfil:

- The patient must be medically fit to undergo a liver surgery.
- The liver must be healthy enough to tolerate a surgery.
- The tumour or growth must not invade vital structures around the liver.
- For patients with liver cancer, the cancer cells must not have spread outside the liver.

The surgeon may perform additional tests to ensure that it is safe for you to undergo a liver resection, and to minimise the risks associated with the surgery. You may also be required to see an anaesthetist for a pre-surgery check to ensure that you are medically fit for the surgery. Some patients may be required to attend the Management and Innovation of Longevity for Elderly Surgical Patients (MILES) programme for pre-habilitation and nutrition optimisation to promote faster recovery after the surgery.

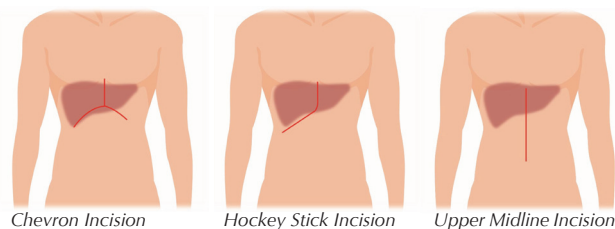
Laparoscopic Liver Resection

A laparoscopic liver resection involves removing part of the liver through multiple small incisions made in the abdomen, with the aid of specialised tools and a camera inserted into the abdominal cavity. Carbon dioxide gas is blown to expand the abdominal cavity to facilitate the surgery. A slightly larger incision will be required at the end of the surgery to enable the surgeons to remove the resected portion.



Open Liver Resection

An open liver resection will require a bigger incision at the start of the surgery compared to the laparoscopic liver resection. This method is preferred for patients with a possibly complicated resection, patients not suitable for laparoscopic surgery, and as a fallback option should laparoscopic surgery be too risky to continue. Depending on the location of the tumour, patients may have different types of incision over the upper abdominal area.



Associated Risks

As with any form of surgery, there are some risks associated with a liver resection. Apart from the common risks associated with surgery under general anaesthesia, others include:

- Bleeding
- Infection
- Injury to surrounding organs
- Post-operative liver decompensation
- Post-operative liver failure
- Conversion from laparoscopic to open surgery
- Bile leak

Before the surgery, your surgeon will explain the specific risks relevant to the type of liver resection that you will undergo.

Before Surgery

- Do not consume any food six hours before the surgery or the surgery may be postponed. However, you may have a sip of water or a carbohydrate drink two hours before the surgery.

- Arrive on time for registration to prevent any delays.
- Notify your surgeon if you are suffering from cough, sore throat or a flu (your operation may be rescheduled).
- Bring any personal items that you may need for your hospital stay.
- Your surgeon or anaesthetist will advise you on which medication you can take on the day of your surgery.

After Surgery

You may be admitted to the Intensive Care Unit (ICU) or Surgical High Dependency Unit (SHD) after the operation for monitoring and recovery. Some patients with only a small portion of liver removed may be transferred to the general ward after surgery.

Adequate pain killers will be given to ensure that your pain is well controlled, and additional medications and IV drips will be given based on your requirements. You may also have an abdominal drainage bag attached after the surgery, which will usually be removed prior to discharge. Regular blood tests will be performed to ensure that your liver is functioning well after the surgery. You will also gradually be allowed water and food as you recover in the ward.

Recovery

After you are discharged from the hospital, you will be given a period of hospitalisation leave to rest and recuperate at home. Here are some pointers to take note of:

- Slowly increase your activity level and exercise by walking every hour.
- Avoid heavy lifting.
- Ensure you drink enough water and have regular meals.
- If you experience abdominal pain, fever, jaundice, or issues with your wound, please contact us at 6772 5083 during office hours, or visit the NUH Emergency Department after office hours.