



## Operation Information

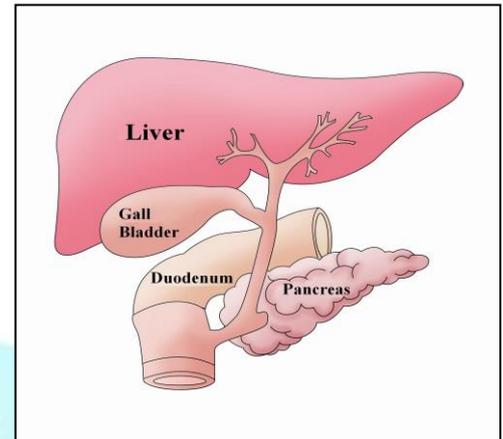
### Cholecystectomy (Open/ Laparoscopic)

#### Introduction

Gallbladder serves the function of concentration and storage of bile for fat digestion. Symptoms of gallbladder diseases include indigestion, nausea, heartburn, right upper abdominal pain and jaundice (if biliary tract is obstructed by stone). Options for surgery are either by laparoscopic approach or conventional open cholecystectomy.

#### Laparoscopic Cholecystectomy (LC)

When compare with traditional conventional open cholecystectomy, LC is considered more beneficial for patient in decreasing postoperative pain, the need for postoperative analgesia and shortens the hospitalization period. LC also improves a cosmetic effect and improved patient satisfaction in progress of recovery.



#### Open Cholecystectomy

In few cases, the laparoscopic approach is not feasible. The doctor will then adopt conventional open cholecystectomy to attain better results.

#### Outcomes

This operation is a surgical intervention to remove the gallbladder. Most are performed to address symptoms related to biliary colic and to treat complications of gall stones. (e.g. acute cholecystitis and biliary pancreatitis)

#### Procedures

1. The operation is performed under general anaesthesia.
2. The operation could be performed by open cholecystectomy or laparoscopic cholecystectomy.
  - i) Laparoscopic Cholecystectomy:
    - 3 to 4 small incisions (wound size of 0.5-1cm) made in abdomen for instruments insertion. Operating space is created with CO<sub>2</sub> insufflations. Visualization of intra-abdominal organs is achieved with video instruments.
  - ii) Open Cholecystectomy:
    - Make a larger incision (about 10-20cm) in upper abdomen.
3. Gallbladder is resected after ligation of cystic duct and artery.
4. If common bile duct stones discovered during operation, measure to deal with the common bile duct stone maybe taken.
5. Drain(s) for removal of fluid might be inserted depending on necessity.
6. The wound is closed with sutures or staples.

## **Possible Risks and Complications**

1. Wound infection
2. Post cholecystectomy syndrome
3. Bile duct injury including bile leakage
  - Higher bile duct injury rate in laparoscopic cholecystectomy
4. Laparoscopic technique related complication, e.g. bowel perforation and vascular injury
5. Postoperative intra-abdominal bleeding, e.g. slipped cystic artery ligature
6. Retained cystic duct stones
7. Port site herniation
8. Adhesive colic or intestinal obstruction
9. Mortality

\*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all procedures are carried out with utmost professionalism and care, this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operation may be necessary.

## **Pre-operative Preparations**

1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of operation.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia. Please inform doctor if you are taking medications that affect blood coagulation such as Aspirin, Warfarin, Xarelto or Pradaxa, nonsteroidal anti-inflammatory drug (NSAID) such as Ibuprofen, Naproxen and Chinese medication.
4. The operation may be performed on either an elective or emergency basis as per your condition, e.g. acute cholecystitis requires emergency operation.
5. The elective surgical patient will be admitted one day prior to or on the day of the scheduled operation.
6. Routine tests such as blood test, cross match, ultrasound, CT scan will be performed before the operation as ordered by the doctor.
7. Nurse will supply surgical soap to you for washing the operation site (especially the belly button) as necessary.
8. No food or drink six hours before operation.
9. Pre-medication or intravenous infusion may be given as doctor's prescription.
10. Please change into surgical gown after removing all belongings including undergarments, dentures, jewellery and contact lenses.
11. Please empty your bladder before the operation.

## **Post-operative Instructions**

### **General**

1. After general anaesthesia, you may:
  - experience discomfort in the throat after tracheal intubation.
  - experience side effects of anaesthesia including feeling tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
2. Mild abdominal pain, shoulder or neck pain is common with CO<sub>2</sub> insufflations and will subside gradually after the operation. Inform the nurse if the pain becomes more severe.
3. Please inform the nurse of wound pain. Proper pain relief treatment by injection or oral medication may be prescribed by the doctor.
4. An indwelling urine catheter will normally be removed in a few days after the operation (if any).
5. An intravenous infusion will be given to replenish fluids and administer medications.
6. You may resume normal activities six hours after the operation if no abdominal drain or intravenous infusion is necessary.
7. You will normally be discharged 1-5 days after the operation (depending on the type of operation performed).

### **Wound Care**

1. The wound will be covered with a sterile dressing which must be kept dry.
2. You may take shower after the operation but must ensure that the dressing is waterproof and remains clean and dry.
3. The abdominal drain (if any) will normally be removed in 2-5 days on a case-by-case basis.
4. The wearing of loose-fitted clothing is encouraged to avoid irritation of the wound.
5. Stitches or staples will be removed in 7-10 days after the operation.

### **Diet**

1. A normal diet may be resumed as instructed after recovering from anaesthesia.
2. After recovery from operation, you are advised to consume adequate fluid and fiber diet to avoid constipation.
3. Avoid high-fat, fried and greasy food or sauces for at least a week after the operation.

### **Activities**

Early mobilization can promote a rapid postoperative recovery. You can resume light activities after the operation. (As advised by your doctor)

### **Advice on Discharge**

1. Full wound recovery may vary from 2 to 8 weeks depending on the type of operation performed.
2. Prescribed pain medication may be taken as needed.
3. You may experience indigestion with fatty foods intake and mild diarrhea within the first 6 months after the operation.
4. Regular activities may be resumed gradually over the next two weeks.
5. Heavy lifting, excessive exertion, bending or stretching should be avoided within the first 4 weeks.
6. Immediately consult your doctor or return to hospital for medical attention in the event of increasing pain, swelling, redness or discharge from wound, persistently feeling sick and/ or vomiting, jaundice or dark wine and pale stool, shivering, high fever over 38°C or 100.4°F, or any other unusual symptoms etc.
7. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

---

---

---

Compiled by Union Hospital Operating Theatre (OT) Governance Committee

The above information is for reference only, please enquire your physician for details  
Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification

