

- The respective team will review the patient and preoperative bloods and X-ray will be done.

### C. Operation.

- Anesthesia: refer to anesthesia leaflet.
- Operation as the above diagram.

### D. After the operation.

- Patient will be brought to surgical ward for post operative care.
- Follow up:
  - 4 – 6 weeks after discharge (may change according to patient medical case and logistics).
  - Venue: Surgical clinic. Menara Utama First floor.
- Home advice
  - No heavy lifting for 2 weeks to 3 months
  - Should consume work in a week to 2 weeks.
  - Should consume normal diet.
  - Advice to come to accident and emergency if patient having persistent fever or redness or discharge from the surgical wound site.

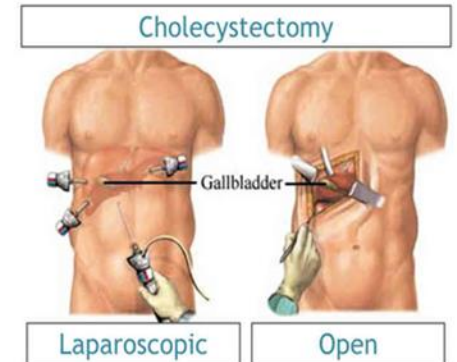
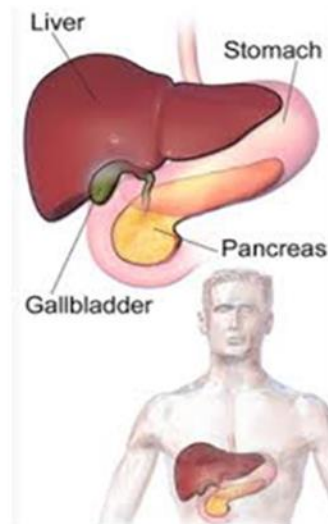
### E. Commonly asked questions

- When should the patient can return to work.
- When can the patient return to normal activities.

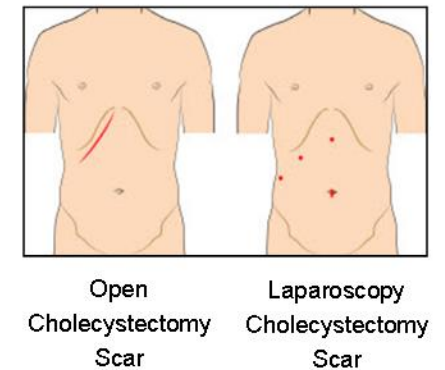
### F. Useful contact numbers and information:

University Malaya Medical Centre:

- Telephone: 03-79494422  
(ext: surgical outpatient clinic)
- <https://www.medicinenet.com/cholecystectomy/article.htm>
- <https://www.nhs.uk/conditions/gallbladder-removal/>



# CHOLECYSTECTOMY



## **A. General Information**

### **1. Introduction**

#### **a. What is Gallbladder**

The gallbladder is a small pouch that sits under the liver. It stores bile that produced by the liver and secretes into the small bowel when it contracts. Removing the gallbladder causes no significant problem.

#### **b. What is Cholecystectomy**

Cholecystectomy is an operation where the gallbladder is removed surgically. It can be done either as an open procedure (Open cholecystectomy) or using a laparoscope (Laparoscopic cholecystectomy). Open cholecystectomy is done whereby an incision is made below the right costal margin. Laparoscopic cholecystectomy is whereby the small incisions are made below the right costal margin and umbilical.

#### **c. Indication of Cholecystectomy**

- i. Cholelithiasis (Gallbladder stone)
- ii. Acute cholecystitis (Inflammation of the gallbladder)
- iii. Chronic cholecystitis
- iv. Mucocele (gallbladder distension due to mucus)
- v. Choledocholithiasis (gall stone in the bile duct)

- vi. Gallbladder empyema (pus in the gallbladder)
- vii. Early gallbladder cancer

### **2. Advantage of Laparoscopy Cholecystectomy**

- I. Reduce hospital stay.
- II. Reduce morbidity.
- III. Reduce post-operative pain.
- IV. Decrease post-operative recovery.
- V. Early return to normal activities.

### **3. Risks / complications of the surgery**

Complications associated with laparoscopic access to the abdominal cavity may be broadly classified into 4 groups: abdominal wall injuries, vascular injuries, visceral injuries and others.

- I. Abdominal wall and intra-abdominal injuries:
  - i. Skin infection.
  - ii. Subcutaneous emphysema.
  - iii. Haematoma.
  - iv. Port site hernia.
  - v. Bleeding.
  - vi. Intra-abdominal abscess collection.
  - vii. Bile leak.
- II. Vascular injuries:
  - i. Bleeding.
  - ii. Gas embolism.

III. Visceral (Bowel) injuries.

IV. Others:

- i. Cardiovascular compromise.
- ii. Respiratory distress.
- iii. Renal impairment.

### **4. Other options if Laparoscopy Cholecystectomy is declined.**

Open Cholecystectomy.

### **5. Conversion**

Conversion rate is 5 – 10%. The indications for converting Laparoscopic Cholecystectomy to an Open Cholecystectomy are:

- a. Uncontrolled bleeding.
- b. Adhesion.
- c. Suspicious other gallbladder pathology.

## **B. Before the surgery.**

### **1. Pre-admission.**

Once the patient is scheduled for a planned (elective) operation, the patient will be assessed by the anesthetist a few weeks before the operation.

2. They would require to register at the Transit Ward in the first floor, Menara Selatan for admission a day before the operation date.
3. The patient will be admitted to the surgical ward once the bed is ready.