

Procedure Information Sheet – Gastrectomy (Open / Laparoscopic)

1. Introduction

- 1.1. Stomach is an organ located on the left upper abdomen behind ribs. It connects the esophagus and the small intestine. It works as a reservoir for food and a section where the food literally gets sterilized and partly digested.
- 1.2. Gastrectomy is surgical removal of stomach. It can be classified as three types:
 - 1.2.1. Partial gastrectomy: removal part of the stomach, the intestine will be re-connected to the remaining stomach.
 - 1.2.2. Total gastrectomy: removal of the entire stomach, the intestine will be re-connected to the esophagus.
 - 1.2.3. Oesophago-gastrectomy: removal the upper part of stomach and part of the esophagus, lower part of your stomach is pulled upwards and attached to the end of your esophagus.
- 1.3. Gastrectomy can be performed in two approaches:
 - 1.3.1. Laparoscopic gastrectomy is a minimally invasive surgery to remove the stomach. The abdominal cavity will be filled with carbon dioxide. A series of small incisions are involved. A laparoscope is used to view the abdominal cavity and remove the stomach through a small incision by dissection instruments.
 - 1.3.2. Open gastrectomy is performed when laparoscopic gastrectomy is not applicable. An incision is made in the abdomen.
- 1.4. It is indicated for:
 - 1.4.1. Gastric Tumors
 - 1.4.2. Life-threatening obesity
 - 1.4.3. Severe gastric bleeding which do not respond to medications
 - 1.4.4. Persisting gastric inflammation
 - 1.4.5. Large gastric polyps
 - 1.4.6. Stomach ulcers

2. Procedural Preparation

- 2.1. You will usually be admitted one day before the operation.
- 2.2. Stop taking anti-coagulant that may increase the risk of bleeding according to doctors instruction, such as aspirin, warfarin and Plavix.
- 2.3. Necessary clinical examinations and investigations may be carried out, such as blood tests, urine tests, electrocardiogram, or chest X-ray etc.
- 2.4. The reason of operation, procedure and possible complications will be explained by the surgeon and consent form will be signed before operation.
- 2.5. Pre-operative anaesthetic assessment will be performed. The anaesthetic management and its possible risks will be explained by the anesthetist with consent for anesthesia signed.
- 2.6. No food or drink is allowed 6 to 8 hours before the operation.
- 2.7. If laparoscopic gastrectomy will be performed, umbilical cleaning is required.
- 2.8. Antibiotic prophylaxis and cross match will be performed.
- 2.9. Prophylaxis against deep vein thrombosis may be indicated for patients at risk.

3. Procedure

- 3.1. This operation is performed under General Anaesthesia.
- 3.2. Incision is made based on the approach of the operation.
- 3.3. The blood supply to the stomach is isolated and tied off.
- 3.4. Part or the whole stomach is removed based on the types of operation.

Hosp No. : HKID No.:
Case No. :
Name :
DOB : M / F
Adm Date :
Contact No.:

Procedure Information Sheet – Gastrectomy (Open / Laparoscopic)

- 3.5. The wound is closed with staples or stitches.
- 3.6. Tubal drains are placed within the abdominal cavity to avoid extensive intra-abdominal collection.
- 3.7. A tube is placed, from the nose to stomach, for regular drainage of gastric fluid.
- 3.8. A tube maybe placed, from the nose to duodenum, to supply nutrition for a short period after the surgery.
- 3.9. A urine catheter is placed to monitor the urine output.

4. **Recovery Phase**

- 4.1. Your vital sign and fluid balance will be closely monitored.
- 4.2. Blood test will be performed to monitor the electrolytes level.
- 4.3. Mild throat discomfort, neck pain, hoarse or weak voice and increased mucus secretion might be experienced after tracheal intubation.
- 4.4. Tiredness, nausea and vomiting may be experienced after general anaesthesia. Inform the nursing team know if symptoms persisted or become severe.
- 4.5. Post-operative pain can be managed by Patient Control Analgesia (PCA) pump which is an electronically controlled infusion pump that delivers a prescribed amount of intravenous analgesic when the button is pressed. Inform nurses for alternative pain control if pain persisted.
- 4.6. Intravenous drip will be continued for nutritional support until feeding resumes.
- 4.7. An X-ray may be performed to confirm no leakage before diet resume.
- 4.8. Diet will be resumed gradually around 3-5 days after the surgery. Start with clear water, fluid, soft and diet as tolerated according to Doctor's prescription.
- 4.9. Inform nurses if you experience excessive pressure over the wound, this may indicate hematoma formation.
- 4.10. Early mobilization as tolerable is suggested to minimize the risk of pneumonia and blood clot in the legs.
- 4.11. Deep breathing exercise is encouraged to prevent post-operative pneumonia.
- 4.12. Place hands over the abdominal wound when coughing or bringing up sputum.
- 4.13. The wound dressing will be kept intact after operation.
- 4.14. Avoid pulling the tubing or drain when mobilize.
- 4.15. Stitches or staples will be removed around 10-14 days.

5. **Possible Risks and Complications**

- 5.1. Complications for general major operation include:
 - 5.1.1. Myocardial Infarction
 - 5.1.2. Myocardial Ischemia
 - 5.1.3. Stroke
 - 5.1.4. Deep Venous Thrombosis
 - 5.1.5. Pulmonary Embolism
 - 5.1.6. Intestinal obstruction or paralytic ileus
- 5.2. Potential complication related to laparoscopic surgery include:
 - 5.2.1. Vascular or visceral injury by trocar insertion (<1%)
 - 5.2.2. Fatal gas embolism and hypercarbia (<1%)
 - 5.2.3. Surgical emphysema and pneumothorax.
 - 5.2.4. Possible injury to vascular and visceral organs including liver, spleen, rectum, urinary bladder, bowel or blood vessels.



Hosp No. :	HKID No.:
Case No. :	
Name :	
DOB :	M / F
Adm Date :	
Contact No.:	

Procedure Information Sheet – Gastrectomy (Open / Laparoscopic)

- 5.2.5. Possibility of tumor metastasis at port site.
- 5.2.6. Further intervention including conversion to open surgery for poor progress or for management of complications.
- 5.3. Potential complications related gastrectomy include:
 - 5.3.1. Bleeding
 - 5.3.2. Infection
 - 5.3.3. Injury to adjacent organs
 - 5.3.4. Fistulation
 - 5.3.5. Leakage from the wound junction causing infection or abscess
 - 5.3.6. The connection to the intestine narrows, causing intestine obstruction
 - 5.3.7. Dumping syndrome
 - 5.3.8. Morning vomiting
 - 5.3.9. Mal-nutrition
 - 5.3.10. Anemia
 - 5.3.11. Mortality (<1%)

6. Discharge Education

- 6.1. Seek medical attention if severe pain, tenderness, purulent discharge, severe vomiting, fever (body temperature above 37.8°C) or rigor occurs.
- 6.2. You may take analgesics as prescribed by your doctor if necessary.
- 6.3. Avoid strenuous activities and heavy lifting for 6 weeks after the operation.
- 6.4. Follow up appointment should be attended as arranged.
- 6.5. Keep your wound dressing clean and dry to minimize risk for infection.
- 6.6. Diet advice:
 - 6.6.1. Eat slowly
 - 6.6.2. Small and frequent meals
 - 6.6.3. Avoid eating high-fiber foods immediately after the surgery.
 - 6.6.4. Eat food with high protein and low in carbohydrates
 - 6.6.5. Avoid simple sugars
 - 6.6.6. Avoid drinking water along with or immediately after eating
 - 6.6.7. If upper part of stomach is removed, sit up for at least one hour after meals to prevent reflux
 - 6.6.8. Take supplements as indicated

7. Remark

- 7.1. The above mentioned procedural information is not exhaustive, other unforeseen complications may occur in special patient groups or different individual. Please contact your physician for further enquiry.

8. Reference

- 8.1. Medindia. What is Gastrectomy?
- 8.2. MedlinePlus. Gastrectomy.
- 8.3. National Health Service, Choices. Gastrectomy.
- 8.4. No Stomach for Cancer. Total Gastrectomy (Complete removal of Stomach).
- 8.5. Hospital Authority. Smart Patient Website.

Hosp No. :	HKID No.:
Case No. :	
Name :	
DOB :	M / F
Adm Date :	
Contact No.:	

Procedure Information Sheet – Gastrectomy (Open / Laparoscopic)

I acknowledged the above information concerning the operation or procedure. I have also been given the opportunity to ask questions and received adequate explanations concerning the condition and treatment plan.

Patient/ Relative Signature: _____

Patient/ Relative Name: _____

Date: _____

