



Procedure Information Sheet

Introduction

Oesophagus is a tubular structure in the upper gastro-intestinal tract that links up the hypopharynx in the neck to the stomach in the abdominal cavity. Anatomically, most of the oesophagus is located within the thoracic cavity. Some vital structures such as trachea, bronchi, pericardium, heart and great vessels are closely related to oesophagus.

Oesophagectomy is the mainstay of treatment for cancer of the oesophagus that is not disseminated and in patients who are medically fit. Nowadays, tri-modality therapy (Chemotherapy, Oncology and Surgery) is commonly arranged in stage 2-3 cancer for better control of the disease.

Indications

- Benign tumor (eg. gastrointestinal stromal tumor)
- Malignancy of the oesophagus
- Perforation
- Non-malignant narrowing (eg. Corrosive stricture)

The Operation / Procedure

1. The operation is carried out under general anesthesia.
2. Epidural anesthesia or "Patient Controlled Analgesia" is frequently applied to reduce post-operative pain in view of the thoracotomy wound.
3. Conventionally, oesophagectomy includes three phases:
 - 3.1 Thoracic part: Surgical resection of the oesophagus
 - 3.2 Abdominal part: Mobilization of the stomach keeping with it the blood supply
 - 3.3 Reconstruction: Anastomosis of oesophageal stump with stomach to maintain the continuity
4. Following oesophagectomy, the stomach is the organ of choice to be pull-up to regain the continuity of the gastro-intestinal tract. However, in selected cases, a segment of the large bowel is required to work as the conduit for reconstruction.
5. Open surgical approach results in incisions over abdomen, chest and perhaps, neck as well. Nowadays, laparoscopic and thoracoscopic dissection can be performed as minimal invasive procedures.
6. Oesophagectomy is an ultra-major operation that takes 5 to 6 hours to be completed.

Before the Operation / Procedure

1. Doctor will explain to patient about operation, risks and complications. Patient has to sign a consent form.
2. Body check up as doctor's order will be done before operation such as blood tests, urine routine, ECG, Lung Function Test and X-ray.
3. Pre-operative anaesthetic assessment about the anaesthetic management, nature of anaesthetic and possible risks and sign the anaesthetic consent form.
4. Optimize pulmonary function, eg stop smoking, vigorous breathing and coughing exercise, treat existing chest infection if any.
5. Enteral feeding or parental nutrition is considered for nutritional support.
6. Skin preparation for bathing and shampooing one day before operation.
7. Fasting for 6 hours before the operation to avoid vomiting and risk of aspiration.
8. Take off underwear, remove denture, contact lens and jewellery (including hair pins, necklace, ear rings and rings etc) then change to operation gown and cap.
9. Empty bladder before transfer to Operation Theater.
10. You may receive a pre-medication.

<p>Patient's Label Patient Name: _____ Hospital No: _____ Episode No: _____</p>



After the Operation / Procedure

1. May need transferred to intensive care unit for ventilatory support and closed monitoring.
2. May feel mild throat discomfort and sputum retention due to intubation. Please use your both hands to protect the abdomen wound if you want to expel the sputum; encourage for deep breathing and coughing exercise.
3. May need to use "Patient Controlled Analgesia" therapy for pain relief in the early postoperative period.
4. Patient will be kept fasting immediately after surgery but will be given intravenous fluid; nasogastric tube is inserted to keep the stomach empty. Oral diet is usually resumed on day 7 to 9 post-operatively.
5. After general anaesthesia and inserted of nasogastric tube, you may feel tired, nausea or vomiting; inform nurses if severe symptoms.
6. Keep the wound dressing clean and dry, abdominal wound stitches or staples will be removed on day 7 to day 14 post-operatively.
7. There may be several drains leading out of the body such as nasogastric tube, abdominal drain and urinary catheter, avoid excessive movement which may pull out and twitching the catheters.
8. Drain and tube would usually be orderly removed on day 3 to day 5 post-operatively upon the progress of the disease recovery.
9. Encourage early mobilization, you should increase daily activity gradually after the operation and can resume normal activities as tolerated assist by nurse.
10. Please attend follow-up at specifies date and time to monitoring the progress after the operation.

Risk and Complication

Specific complications related to oesophagectomy include:

1. Intra-operative bleeding in view of the extensive field of dissection and the nearby major vessels.
2. Anastomotic leakage or stenosis because of tension to anastomosis and / or impaired blood supply / Gastric tube ischemic necrosis
3. Chylothorax as a result of damage to lymphatic ducts.
4. Chest infection / pneumonia.
5. Hoarseness of voice is recurrent laryngeal nerve palsy which can be temporary or permanent.

Majority of the patients are heavy smokers with poor ventilatory function. The thoracotomy wound and single lung ventilation further impair the pulmonary recovery. Indeed, sputum retention and chest complication is still one of the most likely causes of surgical failure.

Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

Reference

Smart Patient Website of Hospital Authority: Oesophagectomy (2017)

Patient's Label
Patient Name: _____
Hospital No: _____
Episode No: _____

Patient's Signature: _____

Date: _____