If you have any questions, please ask your doctor or nurse.

Esophagectomy

You have talked with your doctor about the need for an esophagectomy. This surgery includes removal of much of the esophagus (tube that extends from the back of the throat to the stomach) and nearby lymph nodes.

During surgery, a new pathway is made so that food and fluids can travel from your mouth to your stomach. This is done by connecting the upper end of the stomach to the remaining portion of the esophagus.

Your surgeon can use 1 of 3 methods for the esophagectomy.

- Minimally invasive – This method includes small incisions in the chest and abdomen, and the use of 2 scopes: a thoracoscope (to view and operate in the chest) and a laparoscope (to view and operate in the abdomen).
- Transhiatal – Incisions are made in the neck and abdomen. No incision is made in the chest.
- Thoracotomy – An incision is made on the side of the chest between the ribs. Another incision is made in the abdomen.
Based on your condition, your surgeon will describe the best option for you. This pamphlet provides helpful information to guide you through surgery. It describes the surgery and the care before, during and after your hospital stay. This information will answer many of your questions. Please ask if you have any other questions or concerns.

**Before Surgery**

Please tell your surgeon or nurse about any allergies and all your medicines, including prescription, over-the-counter, and herbals. In some cases, medicines may need to be stopped prior to surgery. Be sure to follow your surgeon’s guidelines about stopping these medicines.

**One Week Before Surgery**

Do not take any medicines that contain aspirin or non-steroidal anti-inflammatory drugs, including ibuprofen (Advil®, Motrin®). If you are unsure about which medicines are included in this group, ask your doctor, nurse or pharmacist. Acetaminophen (Tylenol®) can be taken for minor pain, unless instructed otherwise.

**Night Before Surgery**

Do not eat or drink after midnight. As instructed, take needed medicines with small sips of water. It is a good idea to shower the night before surgery. All nail polish should be removed.

**What to Bring to the Hospital**

Please bring:

- Photo ID.
- Medical insurance information.
- Medicare card (for Medicare patients).
- List of allergies and current medicines (including the last time taken).
- Copies of your advance directive, living will or power of attorney (if you have completed these forms).

Please leave all valuables (jewelry, credit cards, money) at home. You may not wear any jewelry during surgery.

**Arrival**

Please come to Same Day Surgery Reception on the 5th floor of the Galter Pavilion as instructed by your surgeon’s office or the pre-op nurse. If you were not given a specific arrival time, please arrive 2 hours before the time of your surgery.

Parking is available for patients and visitors in the garage at 222 E. Huron, across from the Feinberg and Galter Pavilions. For discounted rates, please bring your parking ticket with you. Tickets can be validated at the Customer Service Desks on the 1st and 2nd floors of the Feinberg and Galter Pavilions, and on the first floor of Prentice Women’s Hospital.
When you arrive at the registration desk, the staff will check you in and update your information as needed. They will then direct you to the waiting area until you are called by the nurse. The staff will notify you if there is any delay.

You will be escorted to the pre-op area on the 7th floor, Feinberg Pavilion. Visitors who plan to stay and wait may wish to check in with the volunteer staff in the Surgical Waiting Room on 7 Feinberg. This helps ensure that they can be contacted when your surgery is over.

**Pre-Surgery (pre-op) Preparation**
Once in the pre-op area, you will change into a hospital gown. The nurse will review your medical history and take your temperature, blood pressure and pulse. Be sure to tell the nurse the exact time you last had anything to eat or drink. An IV (into the vein) line will be placed into your hand or arm.

Medicine is injected into the IV to help you relax. If a thoracotomy incision is planned, an anesthesiologist will place a catheter (a small plastic tube) in the epidural space located around the spinal cord in your upper back. (After surgery, numbing medicine is injected into the epidural catheter to help control your pain.)

**During Surgery**
Once you arrive in the operating room (OR), general anesthesia is given. It begins with IV medicine and includes breathing anesthetic gases mixed with oxygen. You will not be aware of the surgery or your surroundings. A breathing tube is placed into your windpipe to help you breathe during surgery. This is why some patients have a slight sore throat for a day after surgery. A tube is also placed in your bladder to drain urine.

The surgeon will then remove most of the esophagus. The remaining portion of the esophagus will be connected to the stomach. The area where the esophagus and stomach are connected is called the anastamosis. It can be either in the upper part of the chest or in the neck.

The removed portion of esophagus (including tumor, if present, and lymph nodes) will be sent to the lab and examined.

A nasogastric (NG) tube will then be placed into your nose down the repaired esophagus and into your stomach. The NG tube will keep your stomach empty until the repaired area heals.

Your surgeon will also insert a small tube through your abdomen and into your small intestine (jejunum). This tube, called a J-tube, will provide needed nutrients until you are able to eat.

If you had a thoracotomy, a tube will be inserted into the chest and is connected to a container. The tube drains air and fluid from the chest.
After Surgery

After surgery, you will go directly from the OR to the Intensive Care Unit (ICU) on the 7th floor of the Feinberg Pavilion for the first 24 hours. The rest of your hospital stay will be on the 11 West Feinberg post-op unit.

When you arrive in the ICU, a chest X-ray is taken. Oxygen will be given through small tubes that are placed just inside your nose. An IV will remain for needed fluids and medicines.

Your nurse will have you begin coughing and deep breathing exercises right away. This includes using a hand-held device called an incentive spirometer. This device allows you to see how deeply you are breathing. Deep breathing is important to:

- Keep your lungs clear of fluid and mucus.
- Guard against pneumonia.
- Improve how well your lungs work.

Do these exercises 10 times every hour while awake. Be sure to support your incision as shown by your nurse.

Most patients will have pain that increases when they take deep breaths, cough or move. The NG tube also may cause discomfort, such as a sore throat or sinus congestion. Your nurses will give you medicine to control the pain.

If you have an epidural catheter, numbing medicine is given continuously via a pump. The pump also allows you to give yourself added medicine by pushing a hand-held button. You nurse will show you how to do this.

Be sure to tell the nurse how the medicine is working. Rate your pain on a scale of 0 to 10 with 0 meaning no pain and 10 the worst pain you could imagine. Take pain medicine at regular times, as needed. The goal is to keep your pain at a rating less than 4. Good pain control along with deep breathing and walking help speed your recovery.

It is important to get out of bed and walk in the hallways. Be sure to have a nurse or other caregiver help you when you get out of bed or are walking.

Diet

You will not be able to eat or drink anything for at least five days after esophagectomy. Feedings will be given using the J-tube to support your nutrition until you are able to eat. Once the NG tube is removed, you will begin a clear liquid diet. Then you will gradually resume eating.
A clear liquid diet includes:
- Clear juice.
- Jell-O®.
- Clear broth.
- Coffee and tea.

Once you are tolerating the clear liquid diet, you will begin a full liquid diet, which includes:
- Yogurt without fruit.
- Oatmeal or cream of wheat cereal.
- Ice cream.
- Strained cream soups.
- Milk, pudding, sherbet.
- Nutritional supplements (Boost® or Ensure®).

Next, you will advance to a soft diet. A soft diet consists of bland, soft foods and beverages, including:
- Cooked eggs, omelets.
- Pancakes, French toast.
- Canned or cooked fruits (avoid fresh and dried fruits).
- Finely ground lean beef, lamb, pork, veal prepared any way except fried (avoid tough, fatty or spicy meats).
- Mild cheeses.
- Pasta.

Before you resume a regular diet, you will have a barium swallow test. This test makes sure there is no fluid leaking through the anastomosis. During the test, you will be asked to swallow a barium solution while a series of moving X-rays (fluoroscopy) is taken. This test may be done before you go home or soon after.

**Going Home**

Most patients are ready to go home 5 to 7 days after surgery. The IV and chest tube are removed before you go home. Your nurses will provide instructions about caring for the J-tube, including flushing the tube, changing the dressing around it, and calling your doctor if the tube accidentally falls out. Some patients may still be using the tube for feedings, and if so, your nurse will teach you or a family member to perform the feedings. The nurses will review your home care guidelines with you, answer any questions, and arrange for a visiting nurse to visit you after you are home. A prescription for pain medicine will be given to you.
**At Home**

You will remain on a soft diet when you go home from the hospital. Your surgeon will tell you when you can resume a regular diet. Usually, this is after the first visit to the surgeon’s office. Begin your regular diet with small portions.

For the first 2 weeks, **do not eat:**

- Bread or crackers with nuts, seeds or dried fruit.
- Sweet rolls.
- Coarse cereals or cereals with fresh or dried fruit.
- Alcohol, citrus juices or carbonated soda.
- Fried foods, including fried eggs.
- Highly seasoned foods.
- All fresh and dried fruits, fruits with seeds or skin, citrus fruits.
- Shellfish.
- Chili or spicy soups.
- Nuts.
- Rice.
- Candy that contains nuts, seeds or fruit.
- Gas-producing vegetables, such as broccoli or Brussels sprouts.
- Peas, pickles, olives or dried beans.

The J-tube will be removed 1 to 2 months after surgery when your surgeon decides you are eating enough to maintain good physical health.

After esophagectomy, some patients have “dumping syndrome.” This condition happens when food moves from the stomach to the small intestine too fast. Symptoms include nausea, vomiting, abdominal pain, cramps, sweating and diarrhea. Dumping syndrome usually goes away after a period of time. Tips to help you avoid or relieve symptoms of dumping syndrome are:

- Eat small, frequent meals 5 to 6 times each day.
- Eat slowly and chew food completely before swallowing.
- Do not drink liquids with meals. Drink liquids 30 minutes to 1 hour after eating.
- Eat sitting up and stay up for at least 30 minutes after eating.
- Add protein and fiber to your diet.
- Avoid foods high in sugar during the early weeks after surgery. Gradually add these foods into your diet 1 to 2 months after surgery.
Until your first visit in the doctor’s office, keep a diary of all the foods you eat and your weight. Some weight loss is expected after this surgery. Weigh yourself daily at the same time each day.

- Use the same scale.
- Wear the same amount of clothes.

**Activity**
Slowly increase your activity each day. Your activity level will be guided by how you feel. Walk around every 2 hours while awake. Avoid sitting for long periods of time to lower your risk for blood clots. When sitting, elevate your feet. You may tire easily for several weeks. This is normal after surgery. Rest if you get tired. Try to get a good night’s sleep. It may be helpful to take your pain medicine before activity or at bedtime.

You may drive when you are no longer taking pain medicine and you feel you can react in an emergency. This is often 2 weeks after your surgery and your follow-up office visit. Talk with your doctor before you resume driving.

Most patients resume their usual routine within 4 to 6 weeks after surgery. Talk with your doctor about returning to work. This depends on your work and its demands. For 6 weeks, do not lift anything heavier than 10 pounds.

If you are able to walk a flight of stairs without becoming short of breath, you can resume sexual activity. Avoid positions that put pressure on your upper arms or chest area for 6 to 8 weeks.

**Pain Management**
Some pain is expected, but it should lessen each day. Take pain medicine with food to prevent nausea. If your pain medicine has acetaminophen or Tylenol® in it, do not take more than 4,000 mg of acetaminophen or Tylenol® in a 24-hour period. Do not take any other medicines containing acetaminophen or Tylenol®. Be sure to contact your doctor for any severe pain not controlled by your pain medicine.

To avoid constipation, drink plenty of fluids. If needed, you may take an over-the-counter stool softener, such as Colace®. Take it as directed.

**Incision Care and Bathing**
You may shower. Do not take a tub bath or go swimming until your incision is completely healed, which is usually in 2 to 4 weeks. Small paper strips (Steri-Strips™) may have been placed over your incision. If you had a chest tube, a clear dressing will remain over the chest tube site. You can get both the Steri-Strips™ and the clear dressing wet when you shower. Over time the Steri-Strips™ curl up and fall off. Allow them to fall off on their own. The clear dressing may be removed after 2 days. There may be a suture under this dressing. This suture and any remaining Steri-Strips™ will be removed during your follow-up visit in the doctor’s office.
Do not use lotions, creams, or powders near incisions until they are completely healed. Some bruising or redness can be expected. Itching or a small amount of drainage also is normal. Excessive redness, swelling, pain or drainage from the incision may be a sign of infection. Report these signs to your doctor or nurse.

**Follow-up**

If an appointment has not been made for you, call your doctor’s office to schedule a follow-up visit within 2 weeks after your surgery.

**When to Call the Doctor**

Please call your doctor if you have:

- Temperature of 100.5° F or greater.
- Increased swelling, redness, or tenderness at incision site.
- Drainage from your incision.
- Shortness of breath.
- Severe pain not controlled by pain medicine.
- J-tube not working or falls out.
- More than 10 pound weight loss or gain.
- Any questions or concerns.

Thoracic Surgery Office Telephone Number: 312-695-3800

**Health Information Resources**

For more information, visit one of Northwestern Memorial Hospital’s Health Learning Centers. These state-of-the-art health libraries are located on the 3rd floor of the Galter Pavilion and on the 1st floor of the Prentice Women’s Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.