Ivor-Lewis Esophagectomy For GI Patients

ROSWELL PARK COMPREHENSIVE CANCER CENTER | PATIENT EDUCATION

What is an Ivor-Lewis esophagectomy?

An *esophagectomy* is a surgical procedure to remove part or all of the esophagus; the tube that moves food from your throat to your stomach. This may be to treat cancer of the esophagus or to treat a noncancerous condition. There are several ways to perform this surgery, depending on the location and characteristics of the cancer.

In an *Ivor-Lewis esophagectomy*, the operation is a two-step procedure. In step one, we make an incision (cut) through your abdomen (belly). In step two, we make an incision through the right side of your chest. Generally, when the cancer is located in the lower half of the esophagus, we perform the Ivor-Lewis procedure.

How is the procedure done?

We use general anesthesia for this surgery, so you will be asleep through the entire operation, which lasts about 5-6 hours.

Typically, the abdominal surgery comes first.

- We make an incision in your abdomen.
- The abdominal area is examined carefully to make sure the cancer has not spread outside of the esophagus.
- The stomach is immobilized to make it easier to attach it to the remaining esophagus after we remove the cancerous part.
- At the conclusion of the abdominal surgery, we will insert a feeding tube into the small intestine.

Once the abdominal part of surgery is completed, the thoracic (chest) stage of the operation begins.

- We turn you to lie on your left side.
- An incision is made in the right side of the chest, below your arm.
- The right lung is collapsed and moved aside to allow your surgeon to get to the chest cavity.
- The surgeon removes the cancerous part of the esophagus.
- The upper part of the stomach is brought up through the natural opening in the diaphragm (the hiatus) and attached to the remaining part of the esophagus. This is called an anastomosis.
- To prevent fluid buildup while you heal, draining tubes are inserted and kept in place with a few stitches.
- The right lung is put back into position and re-inflated.

How should I prepare for this procedure?

Your healthcare provider will discuss exactly what you will need to do before the procedure. Make sure you tell him or her about all your medications, supplements, and vitamins.

If you take medication for diabetes, talk to the doctor that manages your diabetes about how to take your medication on the day of the surgery.

Many medications, whether over-the-counter or prescription, can interfere with normal blood clotting and

may increase the risk of bleeding. Typically, your doctor will ask you to stop taking medications that affect blood clotting before the procedure. If you take any of these medications or supplements, please check with your doctor if you should follow the timeline and instructions below.

*If your doctor gives you instructions that are different from those in the chart below**, always follow your doctor's orders.***

7 days (one week) before the procedure Stop taking Plavix® (clopidogrel), aspirin, herbal supplements, garlic tablets, and vitamins.
5 days before the procedure Stop taking Coumadin® or Jantoven® (warfarin), Pletal® (cilostazol), and Pradaxa® (dabigatran)
3 days before the procedure Stop taking all non-steroidal anti-inflammatory medications (NSAIDs) • Advil®/ Motrin® (ibuprofen • Aleve®/Anaprox® (naproxen) • Feldene® (piroxicam) • Clinorial® (sulindac) • Orudis® (ketoprophen)
2 days (48 hours) before the procedure Stop taking Fragmin® (dalteparin) and Arixtra® (fondaparinux)
1 day (24 hours) before your procedure Stop taking Lovenox® (enoxaparin)

What should I do on the day before my surgery?

- Drink only clear liquids the day before your surgery.
- Do not eat or drink anything – including water – after **midnight**.
- Perform the bowel prep according to the instructions given to you in the clinic.
- Call 3 West (the ambulatory surgery center) at **(716) 845-8476** to confirm your arrival time at registration.

What should I do on the morning of my surgery?

- You may brush your teeth and rinse with mouthwash. Just be sure to avoid swallowing any water or mouthwash.
- Take only the medications approved by your anesthesiologist, with a very small sip of water. If you are unsure about any of your medications, please call **(716) 845-3167**.

What should I expect before my procedure?

The morning of your surgery, please check in at the Patient Access Department (registration) on the ground floor in the hospital lobby. After check-in, we will direct you to the surgical area.

- After changing into a gown, an intravenous catheter (IV) will be placed in a vein in your arm so that fluids and medications can be given.
- You will receive medication before the surgery to relax you.

- You may receive antibiotics through your IV, if your doctor thinks it necessary.
- You may go directly into the operating room, or you may wait in a "holding area" next to the operating room until the surgical team is ready for you. Your family will not be able to join you in the holding area or the operating room.

What should I expect after my procedure?

- When you wake up after surgery, you will notice you have several tubes. These tubes will help with your post-operative care.
    - A nasogastric tube (NG tube) will be in place. The NG tube runs through your nose and down into your stomach.
        - The NG tube pulls the fluids out of your stomach until you heal and your stomach and bowel begin to function again.
        - After 2-3 days, we will remove the NG tube. After 3-4 days, the physicians will order a swallow test to check that the new connection (anastomosis) is healing well.
        - Usually, you can start drinking clear liquids right after the swallow test confirms that you are healing well. As you recover, your diet increases gradually so your body can slowly get used to the changes from the surgery.

- You will have 1 or 2 tubes to drain fluids from each of the two surgical areas. A chest tube re-inflates your lung after the surgery is complete, and it drains any air and fluid that builds up during your initial healing.
- You will have a catheter that will drain the urine from your bladder. We insert the catheter while you are asleep in the operating room. The catheter will help monitor your hydration (fluid) status, and prevent your bladder from overstretching.
- To give you pain medication after your surgery, you may have either an epidural catheter, or a PCA (patient-controlled anesthesia) pump connected through your IV.
- You will also have a feeding tube (jejunostomy or J tube) that will allow you to receive supplemental nutrition while you are healing. We will remove the J tube when you are eating well and maintaining your nutrition and weight; this can be a few weeks to a few months.

- Your nurses will help you do breathing exercises to help prevent lung and breathing problems.
- On the first day after your surgery, we will help you out of bed and into a chair. By the second day, the nurses will help you walk in the hall. Walking helps prevent blood clots and pneumonia, and speeds up your recovery.

- Another way to prevent blood clots is to use compression cuffs. The cuffs wrap around your legs. They attach to a machine that inflates and deflates them on a regular basis. This massaging/squeezing action keeps the blood circulating in your legs.
- People who have this surgery usually spend 1 - 2 weeks in the hospital.

What should I expect when I am discharged?

- Your doctor will give you medication for pain. Narcotic pain medications can be constipating and your doctor may advise you take a stool softener while you are on the pain medication.
- You may develop issues with constipation or diarrhea, which can be due to your diet and/ or tube feedings. Let your doctor or dietician know if this is a problem.
- You may have sutures (stitches) or staples on your incision. We may remove them at your first post-operative visit.
- You must keep your incisions clean and dry. To help them heal, leave them open to the air as much as possible. You may shower, unless otherwise directed.
- The chest tube site may drain bloody or straw-colored fluid. This is normal. Gauze dressings may be required. You can change these dressings as needed until the area heals.

- A registered dietitian will visit with you and discuss how to change your diet after surgery. He or she will also teach you how to use the feeding tube.

When should I call my doctor?

- Increased shortness of breath
- Chest pain
- Fever of 100.5°F (38°C) degrees or higher, or fever with chills
- Uncontrolled diarrhea or constipation
- Persistent nausea or vomiting
- Increased redness, drainage, swelling, pus, or foul-smelling drainage at the incisions or tube sites
- Bubbling or sucking noise from the chest tube site

If your feeding tube falls out, **call the clinic immediately**. Clinic hours are Monday to Friday from 8:00am to 5:00pm. On nights, weekends, and holidays, call the Roswell Park operator at **(716) 845-2300** and ask for the GI surgeon on call.

When can I return to work and resume normal activities?

This varies from person to person. Esophagectomy is major surgery, and most people experience pain and weakness afterwards. Eating and finding the right foods will be difficult for the first few weeks. You may also experience nausea and constipation. Because of these difficulties, you will probably not be able to resume work

and normal activities within the first month of recovery. After the first month, you will gradually begin to feel more normal and start adding more activities to your daily life.

What are the risks of this procedure?

As with any surgery, there are risks such as bleeding, infection, or an adverse reaction to anesthesia. Other risks include:

- **Respiratory problems**: After any surgery, respiratory problems may occur. You can reduce your risk by doing your breathing exercises and moving around regularly.
- **Leaking**: Leaks can occur around the place where the stomach and esophagus were attached (the anastomosis) during surgery. If these become significant, you may need additional surgery.
- **Gastroparesis (paralysis of the stomach)**: In some patients, the stomach may remain paralyzed after surgery for 4 - 6 weeks, until it adapts to the changes made during surgery. During this time, you may not be able to eat. Should this this happen, you will be fed through the feeding tube. In almost all patients, stomach function returns to normal after this 4 - 6 week period.

Questions or Concerns

If you have questions, please call the GI center at **716-845-4010**. The center is open Monday - Friday, 8:00am to 5:00pm. Your call will be answered even if the center is closed.