PROCEDURE

Esophagectomy - open

An open esophagectomy removes part or all of the esophagus through surgical incisions and rebuilds the passage to the stomach.

PURPOSE
Remove diseased esophagus and restore swallowing

PROCEDURE TYPE
Therapeutic surgery through chest and abdominal incisions

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General

HOW LONG IT TAKES
About 4-8 hours

PREPARATION
Fasting, medicine review, nutrition and breathing preparation

RECOVERY
Days in hospital; no driving until cleared

MAIN RISKS
Leak, pneumonia, bleeding, heart rhythm problems

RESULTS
Surgical findings immediately; pathology usually within several days

Overview

An open esophagectomy is major surgery to remove part or all of the esophagus, the tube carrying food from your mouth to your stomach. "Open" means the surgeon operates through one or more larger incisions, usually in the abdomen and chest. Some operations also require a neck incision.

The digestive tract is then reconnected. Usually, the stomach is reshaped into a narrow tube and joined to the remaining esophagus. Less often, part of the intestine is used. If the operation is for cancer, nearby lymph nodes are usually removed for testing.

Why the procedure is performed

Open esophagectomy is most often used to treat removable esophageal cancer or cancer where the esophagus meets the stomach. Depending on the cancer's location and stage, chemotherapy, radiation therapy, or both may be given before surgery to shrink the tumour and treat cancer cells beyond it.

Less commonly, surgery may be considered for severe non-cancerous damage when the esophagus no longer works or cannot be repaired. Because esophagectomy has lasting effects on eating, it is generally considered only when other treatments are unsuitable or unsuccessful.

Who should and should not have it

You may be offered an open esophagectomy if the abnormal area appears removable and you are fit enough for major surgery. Your team will assess your heart, lungs, nutrition, mobility, and ability to recover.

For cancer, specialists review imaging, endoscopy, biopsy results, and overall health. Surgery is not the best option for every cancer type or stage. It may be avoided if cancer has spread widely, cannot be removed safely, or if the risks outweigh the likely benefit. Definitive chemoradiotherapy may be more appropriate for some people.

Surgery may be delayed to address:

Age alone does not determine eligibility. Overall health, treatment goals, benefits, and risks are more important.

- An active infection or poorly controlled medical condition
- Significant malnutrition or dehydration
- Heart or lung problems needing further assessment or treatment
- Medicines that increase bleeding risk
- Chemotherapy or radiation that must be completed first

How to prepare

Follow your treating facility's instructions, as surgical methods and hospital routines differ.

You will usually have blood tests, heart and lung assessments, imaging, and an anaesthetic review. A dietitian may help improve your nutrition, and you may receive breathing exercises or an activity plan before surgery.

Tell your team about all medicines, vitamins, and supplements. Blood thinners and some diabetes medicines may need adjustment. Do not stop any medicine unless your surgical team tells you to.

You must stop eating and drinking before surgery. Follow the exact fasting times provided by your facility.

If you smoke, stopping can improve breathing and wound healing. Arrange help at home, transport from hospital, and time away from strenuous work.

What happens during the procedure

You receive general anaesthesia and remain unconscious throughout the operation. A breathing tube and monitoring lines are placed after you are asleep.

Incision locations depend on the disease and reconstruction plan. The surgeon may operate through the abdomen and chest, the abdomen and neck, or all three areas.

The affected esophagus, a margin of nearby tissue, and usually lymph nodes are removed. Part of the stomach may also be removed. The stomach is commonly reshaped and moved upward to form a replacement passage. The new connection is called an anastomosis. If the stomach cannot be used, a section of intestine may replace the esophagus.

A feeding tube may be placed into the small intestine. Temporary chest drains, a urinary catheter, and a tube through the nose may also be used.

Recovery and what to expect afterward

Pain around the chest and abdominal incisions is expected. Pain relief may include an epidural, patient-controlled medicine, nerve blocks, or tablets. Good pain control helps you breathe deeply, cough, and move safely.

Nutrition may initially be provided through a feeding tube or vein while the new connection heals. Your team will advise when to begin liquids and soft foods. Over time, small, frequent meals are often easier than large meals.

You will be encouraged to sit up, walk, and perform breathing exercises soon after surgery to reduce lung problems and blood clots. Avoid heavy lifting and strenuous exercise until your team says they are safe.

A hospital stay commonly lasts more than a week. Fatigue may continue after the incisions heal, and returning to work often takes several weeks or longer.

Do not drive while taking opioid pain medicine or until you can turn, brake firmly, and react without pain. Wait until your surgeon clears you, and arrange for someone to take you home.

Risks and possible complications

Your team will explain your individual risks. Important complications include:

Longer-term effects can include reflux, weight loss, reduced appetite, and difficulty eating large meals. Dumping syndrome may cause cramping, diarrhea, dizziness, or sweating when food moves too quickly into the small intestine.

Further procedures may be needed to treat a leak or stretch a narrowed connection. Rarely, complications can be life-threatening.

- Leakage where the digestive tract was reconnected
- Pneumonia, breathing difficulty, or fluid around the lungs
- Bleeding, infection, or blood clots
- Irregular heart rhythm, particularly atrial fibrillation
- Vocal cord injury causing a weak or hoarse voice
- Narrowing at the new connection, making swallowing difficult

Results and follow up

The surgeon can usually explain the main findings soon after surgery. Removed tissue is examined by a pathologist, with results often available within several days.

For cancer, the report describes the cancer type, depth, lymph node involvement, and whether the cut edges are free of cancer. These findings help determine the final stage and whether further treatment may help.

Follow-up checks your wounds, swallowing, weight, nutrition, pain, and activity. Cancer follow-up may also include oncology appointments and additional testing.

Alternatives

Alternatives depend on why surgery was recommended:

The choice depends on the chance of controlling the disease, treatment risks, side effects, and

your priorities.

- Minimally invasive or robotic esophagectomy: Uses smaller incisions but remains major surgery and is not suitable for everyone.
- Endoscopic treatment: May remove very early cancers limited to the inner lining but cannot treat deeper disease.
- Definitive chemoradiotherapy: May control or cure some cancers without surgery, although it has its own side effects.
- Systemic treatment: Chemotherapy, targeted therapy, or immunotherapy may be used when surgery is unlikely to remove all cancer.
- Symptom-focused treatment: A stent, radiation, feeding support, or other measures may improve swallowing and comfort without major surgery.

When to call your healthcare team

Contact your surgical team promptly for increasing wound redness or drainage, worsening pain, repeated vomiting, new trouble swallowing, fever, persistent diarrhea, or difficulty meeting fluid and nutrition goals.

Seek emergency help for:

Follow your hospital's discharge instructions and use its specific contact numbers.

- Severe or rapidly worsening chest or abdominal pain
- Sudden shortness of breath or coughing up blood
- Fainting, confusion, or severe weakness
- Heavy bleeding
- A fast or irregular heartbeat with chest pain, breathlessness, or dizziness

Common questions

Will I be asleep?

Yes. You receive general anaesthesia and usually wake in a closely monitored recovery or intensive care area.

Can I drive home?

No. Someone must take you home. Do not drive until your team clears you and you are no

longer taking medicines that impair alertness.

How painful is it?

Pain is expected after major chest or abdominal surgery. Tell staff if pain prevents you from breathing deeply, coughing, sleeping, or walking so they can adjust your treatment.

When will I know the results?

Your surgeon can discuss the operation soon afterward. The detailed pathology report usually takes several days and may be reviewed at a follow-up appointment.

Will I be able to eat normally again?

Most people return to eating by mouth, but meal size and eating habits usually change. Small, frequent meals and careful chewing are often needed. A dietitian can help you maintain weight and nutrition.

Sources

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- MedlinePlus. Esophagectomy - discharge
- Low DE, Allum W, De Manzoni G, et al. Guidelines for Perioperative Care in Esophagectomy: Enhanced Recovery After Surgery Society Recommendations. World Journal of Surgery. 2019;43:299-330