PROCEDURE

Mastectomy

Mastectomy is surgery to remove one or both breasts to treat cancer or reduce breast cancer risk.

PURPOSE
Remove breast tissue to treat or reduce breast cancer risk

PROCEDURE TYPE
Therapeutic surgery through chest incisions

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
General

HOW LONG IT TAKES
One to three hours; longer with reconstruction

PREPARATION
Medication review, fasting, transport, and home support

RECOVERY
Same day to several days; no driving until cleared

MAIN RISKS
Bleeding, infection, fluid collection, lymphoedema

RESULTS
Several days to two weeks for final pathology

Overview

A mastectomy is surgery to remove most or all breast tissue. It may be done on one breast or both breasts. The operation is most often used to treat breast cancer. Some people at high risk of developing breast cancer choose it to reduce that risk.

The exact operation is planned around the reason for surgery, the location and size of any cancer, your breast shape, and whether you want reconstruction.

Types include:

Breast reconstruction can be done during the same operation or later. Some people choose not to have reconstruction and may use a breast form, also called a prosthesis.

- Total or simple mastectomy: removes the breast tissue, nipple, and areola

- Skin-sparing mastectomy: keeps most breast skin for reconstruction
- Nipple-sparing mastectomy: keeps the skin, nipple, and areola when medically suitable
- Modified radical mastectomy: removes the breast and more lymph nodes under the arm

Why the procedure is performed

A mastectomy may be offered to treat invasive breast cancer or ductal carcinoma in situ, known as DCIS. DCIS means abnormal cells are contained within the breast's milk ducts.

It may be recommended when cancer affects a large area of the breast, occurs in several separate areas, or returns after previous breast-conserving treatment. It may also be considered when radiation therapy is not possible or when you prefer mastectomy after discussing your options.

Risk-reducing mastectomy may be considered if you have a very high inherited risk, such as certain harmful gene changes, or a particularly strong family history. It greatly reduces risk but cannot remove every breast cell, so it does not reduce risk to zero.

Who should and should not have it

Mastectomy may be appropriate if removing the breast offers effective cancer control or if your future breast cancer risk is high enough to justify major surgery. Your preferences matter, especially when breast-conserving surgery is also medically suitable.

It may not be the right option if a smaller operation can meet your goals and you would prefer to keep most of the breast. For many people with early breast cancer, lumpectomy followed by radiation offers survival outcomes similar to mastectomy.

Risk-reducing mastectomy is generally not appropriate for someone at average breast cancer risk. It has lasting physical and emotional effects and may not improve survival for every person considering it.

Surgery may need to be delayed if you have an active infection or a serious medical condition that makes general anaesthesia unsafe. Smoking or poor blood flow can increase wound and reconstruction problems. Your team may recommend stopping nicotine before surgery or changing the reconstruction plan.

Nipple-sparing or immediate reconstruction is not suitable in every case. Tumour location, breast size, previous radiation, blood supply to the skin, and other health conditions may affect these choices.

How to prepare

Your treating facility's own instructions take priority because fasting times, medication plans, and admission arrangements differ.

Tell the surgical team about all prescription medicines, over-the-counter products, vitamins, supplements, allergies, and previous reactions to anaesthesia. Do not stop blood thinners like warfarin or apixaban , diabetes medicines, or other regular treatments unless the team gives you a specific plan.

You will usually need to stop eating and drinking before general anaesthesia. Follow the exact times provided by the facility.

Before surgery, you may meet the breast surgeon, anaesthesia team, specialist nurse, and reconstructive surgeon. Ask whether lymph nodes will be removed, whether reconstruction is planned, and how many nights you may stay.

Arrange for someone to take you home and help with meals, household tasks, children, or pets. Bring loose clothing that opens at the front. Your team may also suggest a soft postoperative bra or camisole.

What happens during the procedure

You receive general anaesthesia, so you are unconscious and do not feel the operation.

The surgeon makes an incision across the breast and removes the planned breast tissue. The amount of skin removed depends on the type of mastectomy and whether reconstruction is being performed.

If cancer could have reached the lymph nodes, the surgeon may remove one or more nodes from the armpit. A sentinel lymph node biopsy removes the first nodes most likely to receive cancer cells. An axillary lymph node dissection removes more nodes when needed.

Reconstruction may use an implant or tissue from another part of your body. It may begin immediately or be delayed until after other cancer treatment. If you do not have reconstruction, the surgeon shapes the remaining skin to create a flat chest contour.

One or more thin drainage tubes may be placed under the skin to remove blood and fluid. The incision is closed with stitches, surgical glue, or staples and covered with a dressing.

Recovery and what to expect afterward

Pain, tightness, bruising, numbness, and pulling around the chest or armpit are common at first. You will be offered pain relief. Numbness may improve slowly, but some loss of feeling can be permanent.

You can usually drink and eat once you are awake and not feeling sick. Start with foods you tolerate and return to your usual diet as advised.

Gentle walking helps circulation. Your team will show you shoulder and arm exercises to reduce stiffness. Avoid heavy lifting, strenuous exercise, and soaking the wound until you are told it is safe. If you have drains, you may need to measure and record the fluid at home.

Do not drive home. Resume driving only when your team has cleared you, you are no longer taking medicine that affects alertness, and you can comfortably control the vehicle and perform an emergency stop.

Time away from work often lasts several weeks. A physically demanding job or reconstruction may require longer than desk-based work. Recovery is usually slower after surgery on both breasts or reconstruction using your own tissue.

Risks and possible complications

Possible complications include:

Removing lymph nodes can cause lymphoedema, which is persistent swelling in the arm, hand, breast, or chest. The risk is higher when more nodes are removed or the area also receives radiation.

Further surgery may be needed for bleeding, poor healing, involved margins, or reconstruction problems.

- Bleeding or a collection of blood called a haematoma
- Infection of the wound or reconstructed breast
- A pocket of clear fluid called a seroma
- Delayed healing or loss of skin or nipple tissue
- Persistent numbness, tightness, or nerve-related pain
- Shoulder stiffness or reduced arm movement
- Blood clots or complications from anaesthesia
- Implant problems or failure of reconstructed tissue

Results and follow up

Removed breast tissue and lymph nodes are examined in a laboratory. The pathology report describes the type and size of any cancer, whether lymph nodes contain cancer, and whether cancer cells reach the tissue edges, called margins.

Final results often take several days to two weeks. Your team will tell you when and how you will receive them.

The results help guide decisions about treatments such as hormone therapy, chemotherapy, targeted therapy, or radiation. Mastectomy does not automatically mean that no further treatment is needed.

Routine follow-up also covers wound healing, drain removal, arm movement, prosthesis fitting, reconstruction, and emotional recovery.

Alternatives

The alternatives depend on whether the goal is cancer treatment or risk reduction.

For someone with serious health problems or limited life expectancy, symptom-focused care or non-surgical treatment may better match personal goals.

- Lumpectomy followed by radiation: keeps most of the breast and is suitable for many early cancers. It usually requires radiation and may need another operation if margins contain cancer
- Treatment before surgery: chemotherapy, hormone therapy, or targeted therapy may shrink some cancers enough to allow breast-conserving surgery. It takes time and is not effective or appropriate for every cancer
- Careful surveillance for high-risk people: enhanced screening avoids major surgery but does not prevent cancer and can lead to repeated scans or biopsies
- Risk-reducing medicine: may lower the chance of certain hormone-sensitive cancers without surgery, but it has side effects and does not remove all risk
- No reconstruction: avoids additional reconstructive surgery but leaves a flat chest or the option of using an external breast form
- Delayed reconstruction: shortens the initial surgery but requires another procedure later

When to call your healthcare team

Contact your surgical team promptly for increasing redness, warmth, swelling, wound opening, pus, worsening pain, or a fever at or above the threshold in your discharge instructions. Also call for sudden bloody drainage, a drain that stops while swelling increases, or new swelling in the arm or hand.

Questions about drain care, dressings, mild numbness, exercise, or pathology appointments can usually be handled during office hours.

Seek emergency help for severe trouble breathing, chest pain, fainting, confusion, uncontrolled bleeding, or a suddenly cold, pale, or dark reconstructed breast.

Common questions

Will I be asleep for a mastectomy?

Yes. Mastectomy is performed under general anaesthesia, so you are unconscious during the operation.

Can I drive home after surgery?

No. Someone else must take you home. Do not drive again until you can move comfortably, react safely, and are no longer taking medicines that impair alertness.

How painful is a mastectomy?

Pain and tightness are expected, especially during the first few days. Medicine, gentle movement, and positioning usually help. Tell your team if pain is getting worse or is not controlled.

When will I know the results?

The surgeon may explain what was done soon after surgery, but final pathology commonly takes several days to two weeks.

Will I need radiation after a mastectomy?

Some people do. The decision is based on findings such as tumour size, lymph node involvement, and whether the margins are clear.

Can I choose not to have breast reconstruction?

Yes. Reconstruction is optional. You may remain flat, use an external breast form, or consider reconstruction later.

Sources

- National Cancer Institute. Breast Cancer Treatment (PDQ®)-Patient Version
- National Cancer Institute. Surgery to Reduce the Risk of Breast Cancer
- American Cancer Society. Mastectomy
- American Cancer Society. Lymph Node Surgery for Breast Cancer
- NHS. Mastectomy
- Cancer Research UK. Mastectomy for Breast Cancer