PROCEDURE

Breast reconstruction

Breast reconstruction is surgery that rebuilds breast shape using an implant, your own tissue, or both.

PURPOSE
Restore breast shape after removal or major tissue loss

PROCEDURE TYPE
Therapeutic surgery using implants, your tissue, or both

WHERE IT IS DONE
Operating theatre, during mastectomy or in a later operation

ANAESTHESIA
General anaesthesia

HOW LONG IT TAKES
About 1 to 8 hours, based on reconstruction method

PREPARATION
Fasting, medication review, and smoking cessation if applicable

RECOVERY
Hospital stay; no driving until off opioids and moving safely

MAIN RISKS
Infection, bleeding, wound problems, implant or flap failure

RESULTS
Initial shape immediately; final appearance settles over several months

Overview

Breast reconstruction is surgery to rebuild one or both breasts, usually after a mastectomy for breast cancer treatment or risk reduction. It may also repair changes caused by previous surgery, injury, or a congenital difference.

The reconstructed breast will not be identical to a natural breast. Scars remain, and sensation is often reduced. The aim is to create a breast shape that looks balanced under clothing and meets your preferences.

Reconstruction may use an implant, your own skin and fat as a tissue flap, or both. Fat transfer can make smaller adjustments. Surgery may be performed during mastectomy or months or years later, and more than one operation may be needed.

Reconstruction is optional. Remaining flat or using an external breast form are also valid choices.

Why the procedure is performed

Reconstruction restores breast shape after tissue has been removed or significantly changed. It may help some people feel more comfortable with their body or clothing.

Surgery on the other breast, such as a lift or reduction, may sometimes improve balance. Reconstruction does not treat cancer. Its timing must be coordinated with surgery, chemotherapy, radiotherapy, hormone treatment, and other cancer care.

Who should and should not have it

You may consider reconstruction if you are having or have had a mastectomy. Options depend on your health, body build, previous operations, cancer treatment, available donor tissue, and personal priorities.

Surgery may be delayed or avoided because of:

Radiotherapy can tighten tissues and slow healing. It does not always prevent reconstruction, but it may affect the method or timing. Your surgeon should explain realistic results, scars, reduced sensation, possible future operations, and the option not to have reconstruction.

- An active infection or unhealed wound
- A condition that makes anaesthesia unsafe
- Poorly controlled diabetes or another healing problem
- Smoking or nicotine use, which increases wound and flap complications
- Cancer treatment that must start without delay
- Too little suitable tissue for the proposed flap

How to prepare

Follow your treating facility's instructions, as they take priority over general advice.

You will usually meet breast and plastic surgeons to discuss implant and tissue-based options, scar placement, and timing.

Tell the team about all medicines, vitamins, and supplements you take. Blood thinners and some other medicines may need adjustment, but do not stop anything unless instructed.

Stop smoking and using nicotine if asked. Nicotine reduces blood flow and interferes with healing. Follow instructions about fasting and arrival time. Arrange transport and help at home, prepare loose front-opening clothes, and place everyday items where you can reach them without stretching.

What happens during the procedure

You will usually have general anaesthesia and be unconscious during surgery.

For implant reconstruction, the surgeon places an implant over or beneath the chest muscle. A temporary tissue expander may be used first. It is gradually filled at clinic visits and later exchanged for a permanent implant.

For tissue-flap reconstruction, skin and fat are moved from the abdomen, back, thigh, or buttock. The tissue may remain attached to its blood supply or be detached and reconnected to chest blood vessels using microsurgery.

Drains may remove fluid from the surgical area. Dressings and a supportive bra may be applied. If the nipple and areola are removed, later options include nipple reconstruction or medical tattooing. Fat grafting may also refine the shape.

Recovery and what to expect afterward

Pain, tightness, swelling, and bruising are expected. Flap surgery also causes discomfort at the donor site. Tell the team if pain relief is not working.

You can usually eat and drink once awake and not feeling sick. Gentle walking is encouraged, but lifting, strenuous exercise, and overhead movements may be restricted. Follow your team's wound care and arm exercises.

Do not drive while taking sedating pain medicine or if pain or limited movement prevents safe steering, checking blind spots, or making an emergency stop. Check any insurer requirements.

Recovery often takes several weeks and is generally longer after flap surgery than implant surgery. Breast position, softness, swelling, and scars may continue changing for several months.

Risks and possible complications

General risks include anaesthetic complications, bleeding, infection, blood clots, fluid collections, delayed healing, scarring, and reduced breast or nipple sensation.

Implant problems can include hard scar tissue, movement, rippling, rupture, pain, infection, or exposure through the skin. Implants are not lifetime devices and may eventually need replacement.

Breast implant-associated anaplastic large cell lymphoma, or BIA-ALCL, is an uncommon immune-system cancer linked mainly to certain textured implants. Persistent swelling, a new lump, or fluid around an implant needs assessment.

A tissue flap can partly or completely lose its blood supply. This may require urgent surgery, and some tissue may not survive. Donor-site risks include weakness, bulging, hernia, poor healing, and altered sensation.

Fat necrosis can cause firm areas within the breast. Any new lump should be examined rather than assumed to be a surgical change.

Results and follow up

You will see an initial breast shape after surgery, but swelling and dressings hide the final result. Tissues may take several months to soften and settle.

Follow-up appointments check wounds, drains, flap blood flow, shoulder movement, and infection. Expanders may be filled during later visits. Further procedures can include implant exchange, fat grafting, nipple reconstruction, tattooing, or balancing surgery.

Reconstruction does not replace cancer follow-up. Mammograms of the reconstructed side may not be required after mastectomy, depending on remaining tissue. Continue recommended screening of any natural breast.

Report new lumps, skin changes, persistent swelling, or changes in implant shape. Your team may recommend implant imaging based on implant type and current guidance.

Alternatives

Alternatives include:

Ask how each choice affects scars, sensation, recovery, radiotherapy, symmetry, and the likelihood of future operations.

- Flat closure: Creates a smooth, flat chest contour without a breast mound.
- External breast form: A removable form worn in a bra or attached to the skin.
- Delayed reconstruction: Allows more time to decide or complete cancer treatment but requires later surgery.
- Breast-conserving surgery: Removes the tumour, usually followed by radiotherapy. It is not suitable for every cancer.
- Oncoplastic surgery: Combines cancer removal with breast reshaping when breast-conserving treatment is appropriate.

When to call your healthcare team

Contact your surgical team promptly for increasing redness, warmth, drainage, worsening pain, fever, wound opening, or new or increasing swelling. Also call if a drain stops working unexpectedly or suddenly fills with blood.

After flap reconstruction, seek urgent advice if the flap changes colour, becomes unusually cool, or rapidly swells. Blood-flow problems are time-sensitive.

Seek emergency care for difficulty breathing, chest pain, fainting, confusion, coughing up blood, or sudden painful swelling in one leg.

Questions about stable scars, numbness, shape, implant checks, or returning to activities can usually wait for a scheduled appointment unless something changes suddenly.

Common questions

Will I be asleep?

Yes. Breast reconstruction is usually performed under general anaesthesia.

Can I drive home?

No. Arrange transport. Do not drive until you are off sedating pain medicine and can safely control the vehicle.

How painful is it?

Pain and tightness are common, especially during the first few days. Flap surgery also causes donor-site pain. Medicine and gradual movement usually help.

When will I know what it looks like?

You will see an initial shape after dressings are removed, but swelling and firmness can take

several months to settle.

Will the reconstructed breast have feeling?

Sensation is usually reduced because nerves are cut during mastectomy. Some feeling may return, but normal sensation is not guaranteed.

Will I need more surgery?

Possibly. Implant exchange, expander removal, fat grafting, nipple reconstruction, scar revision, or treatment of complications may require further procedures.

Sources

- National Cancer Institute. Breast Reconstruction After Mastectomy . Patient information on timing, methods, recovery, and cancer follow-up
- U.S. Food and Drug Administration. Risks and Complications of Breast Implants . Safety information for patients considering or living with implants
- American Cancer Society. Breast Reconstruction Options . Patient guidance on implants, tissue flaps, timing, and recovery
- American Society of Plastic Surgeons. Breast Reconstruction Risks and Safety . Patient information on surgical and implant-related complications
- NHS. Breast Reconstruction . Patient guidance on reconstruction methods, preparation, recovery, and alternatives