Breast Reconstruction Matters

You have a choice when it comes to breast reconstruction

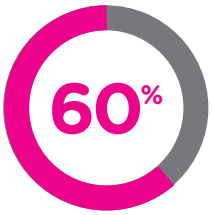
Is breast reconstruction right for you?

Choosing whether or not to have breast reconstruction is a big decision, but it can bring real benefits.[1] For many women, it is the first personal choice they have after being told they have breast cancer.

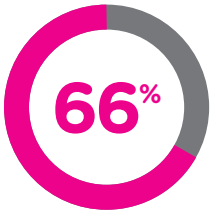
And more and more women like you are making the choice.

You should always consult your healthcare professional to discuss whether breast reconstruction is right for you.

IN A RECENT NATIONAL SURVEY RUN BY THE NHS[1] OF 3,389 WOMEN WHO HAD IMMEDIATE RECONSTRUCTION POST-MASTECTOMY:



of women felt attractive after reconstructive surgery and liked how they looked in the mirror

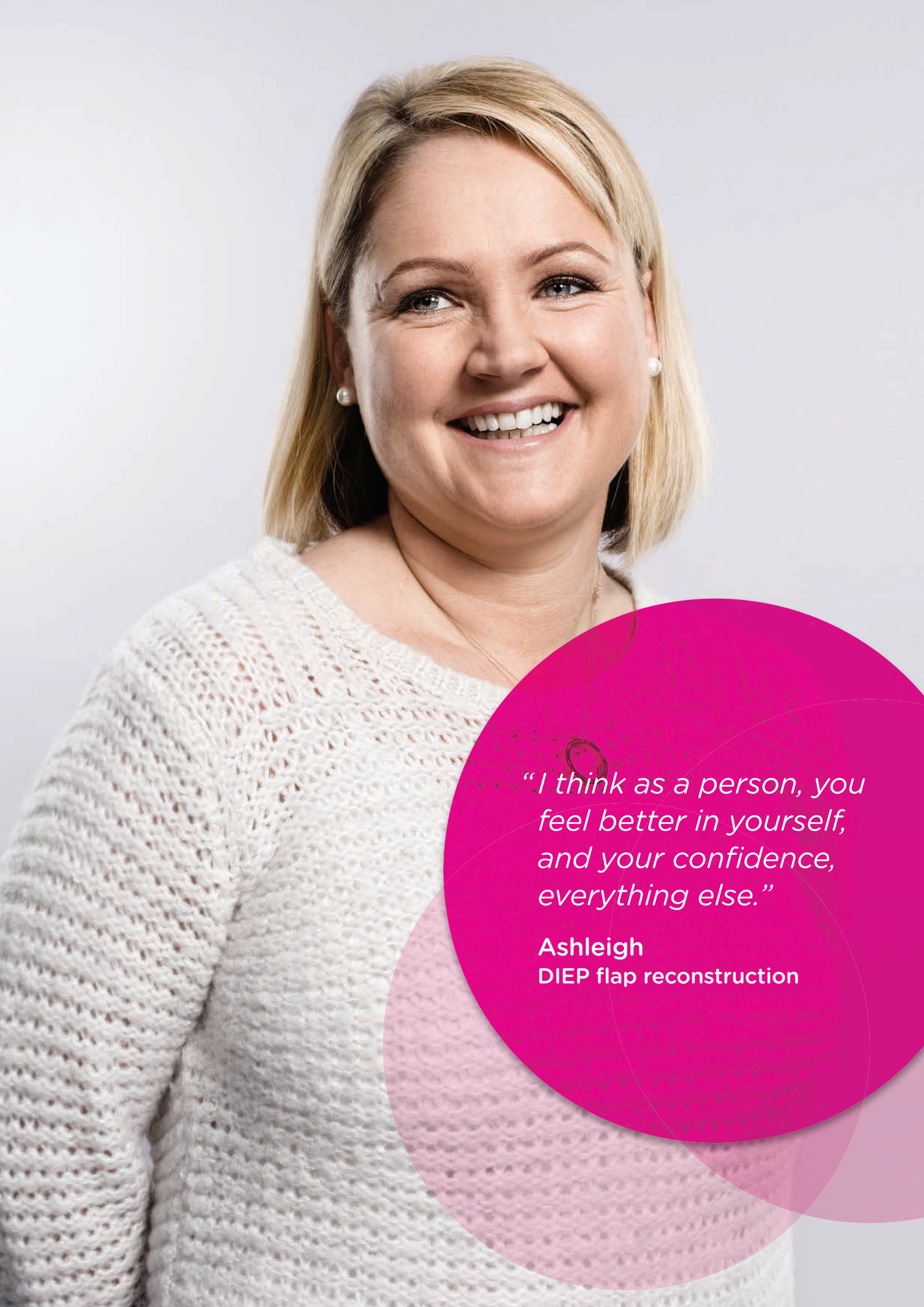


of women thought their new breast(s) felt natural

This data is to inform patients of other women's responses. You should always consult your healthcare professional about whether or not to have breast reconstruction surgery, and to discuss the risks and benefits of complex procedures, long term issues that may occur as a result of your breast cancer surgery and any other treatments you may need.

If you decide to have breast reconstruction, there are a few kinds to choose from:

- Autologous breast reconstruction
- Tissue matrix and implant reconstruction
- Implant-only reconstruction
- Tissue expander-to-implant reconstruction



"I think as a person, you feel better in yourself, and your confidence, everything else."

Ashleigh
DIEP flap reconstruction

Autologous Breast Reconstruction

With this operation, your new breast is made from muscle, fat and skin from other areas of your body.

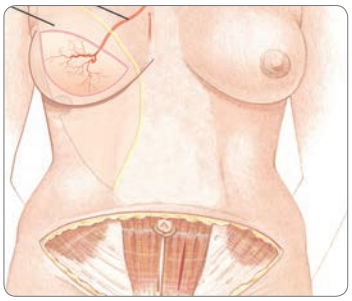
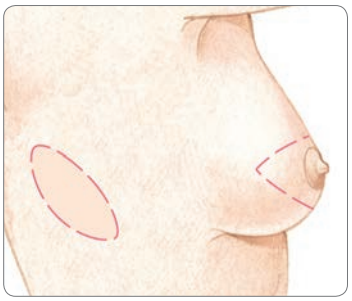
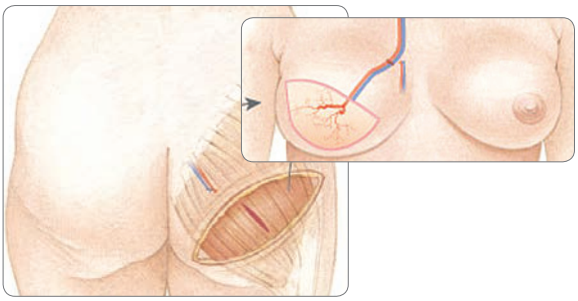
There are 5 areas of the body that can be used:

- A TRAM (Transverse Rectus Abdominis Muscle) Flap uses skin, fat and muscle from the stomach area
- A Latissimus Dorsi Flap uses muscle and/or fat from the upper back and/or shoulder
- A DIEP (Deep Inferior Epigastric Artery Perforator) Flap uses fat and skin from the stomach area while preserving the abdominal muscle
- A SGAP (Superior Gluteal Artery Perforator) Flap uses tissue from the buttocks
- TMG/TUG (Transverse Myocutaneous Gracilis) Flap uses tissue from the inner thigh

Like all operations, autologous reconstruction is not right for everyone and you should talk to your surgeon about whether it is the right choice for you.

Autologous reconstruction is not recommended for women who smoke. Diabetic patients and those with a high BMI should be aware of a higher risk of wound complications.

THE GOOD	SOME RISKS
• As this is your own skin and tissue, the breast can look and feel natural • You won't have the risks that you might have with an implant • Breasts will behave like normal, so they may shrink or get larger as your weight changes; they may also sag with age. • Can undergo radiation with less risk than other reconstruction types	• This type of operation can have a long recovery time, as the surgeon has operated on two areas of your body, which means that you will have two wounds that need to heal • Abdominal wall weakens (DIEP, Tram) and shoulder can stiffen (Latissimus Dorsi) • You will have a scar where the surgeon took the fat/skin from (donor site) • Breasts may be uneven/different sizes and require further operations • The donor site skin may be a different colour as it comes from a different area of your body • Sometimes there are blood circulation issues when the tissue is moved from another part of the body to the breast and the tissue can 'die off', which can lead to failure of the reconstruction

A DIEP Flap	A Latissimus Dorsi Flap	A SGAP Flap
		

Artist's renderings

“ I wanted reconstruction straight away. I wanted to wake up with something there.”

Joanna
LD flap reconstruction

Implant Reconstruction

Reconstruction with an implant only (one-stage reconstruction)

This operation is done at the same time as the mastectomy, so you will wake up with your implants in place. With this reconstruction, the surgeon completes the mastectomy and then puts the implant in to create your new breast; this does not require expansion like tissue expander-to-implant reconstruction detailed below.

Like all operations, implant reconstruction is not right for everyone and you should talk to your surgeon about whether it is the right choice for you.

THE GOOD	SOME RISKS
• This is a fairly short operation • You may be back on your feet more quickly than if you had an autologous reconstruction, and you will be able to perform lighter tasks quickly, like bathing and dressing on your own • You will have a shorter stay in hospital • No need to take fat/skin from anywhere else on your body	• Breasts may be uneven/different sizes • If you have had radiotherapy your skin may thicken, making it difficult to hold the implant. This may also lead to a complication called 'capsular contracture' • As implants can still move inside the breast, some patients may experience an implant that is too low or too high. If this happens, you may need another surgery to help the implant sit in the right place • You may experience bleeding, pain, infection and bruising after the operation • The implant can be damaged or may rupture/leak • There is a risk of infection and risk of implant loss

Tissue expander-to-implant reconstruction
(two-stage reconstruction)

In this operation, something called a tissue expander is placed under the muscle in your breast after the mastectomy. Your surgeon fills it with sterile fluid over a period of weeks so that it inflates like a balloon. This is done so there is enough space for your final implant.

When the expander is big enough, you will then go back to the hospital for a second operation to take out the expander and put in the permanent implant.

Like all operations, two-stage reconstruction with an expander and implant is not right for everyone and you should talk to your surgeon about whether it is the right choice for you.

THE GOOD	SOME RISKS
• No need to take fat/skin from anywhere else on your body • This is a fairly short operation • You may be back on your feet more quickly than if you had an autologous reconstruction • You will have a shorter stay in hospital	• You will have to visit your surgeon more often to inflate the expander over time; usually this takes a few weeks • You will need a second operation to swap the expander for the implant • There is a risk of infection and implant loss • The expander can be uncomfortable, feel hard and may need to stay in place for a few weeks after the operation. But don't worry—your surgeon will change it for a softer one later on • Risk of developing 'capsular contracture'

"...my daughter looks at me, and she's really envious. She says I'm better than her, and wants hers to look as good as mine."

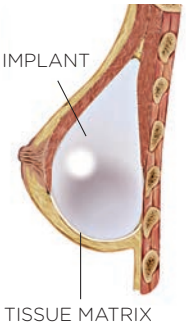
Jenny
Strattice™ Tissue Matrix with implant reconstruction

Tissue matrix and implant reconstruction

The newest type of breast reconstruction

A tissue matrix is a piece of natural material used by your surgeon that is put into your body to hold the implant in place, just like a bra holds your breast. It is like your own body tissue, and it can make your reconstructed breast(s) feel more natural to the touch when an implant is your choice.

A tissue matrix can allow a mastectomy and breast reconstruction to be completed in the same operation. This means that you can wake up after your procedure and your reconstruction will be complete.



Strattice™ Reconstructive Tissue Matrix is a natural type of tissue matrix that may help your surgeon make breasts that are more natural looking and feeling than ordinary breast implant reconstructions. It does this by giving your surgeon more control over the breast shape and position, holding your implants in place.

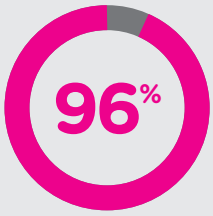
Strattice™ Tissue Matrix can also cover, cushion and hide your implant so it looks and feels more natural.

THE GOOD	SOME RISKS
• A tissue matrix holds your implants in the right place just like a bra • May create a more natural looking and feeling breast than other implant-based surgery types • You can have the mastectomy and reconstruction in the same operation so you wake up with your new breasts • Widely available across the UK and used in the NHS since 2008	• You may not be a good candidate for a tissue matrix • You may experience bleeding, pain, infection and bruising after the operation • Just like normal implant reconstruction, there is a risk that the implant can be damaged or rupture/leak • There is a risk of infection and risk of implant loss • Breasts may be uneven and require correction (like any reconstruction)

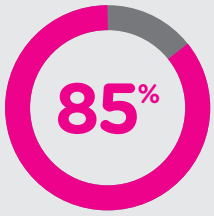
Like any type of operation, there are risks and you must speak to your surgeon about whether a tissue matrix is the right choice for you.

In a study completed at University Hospital South Manchester, women who had reconstruction with Strattice™ Tissue Matrix were very happy with how their breast(s) looked:[2]

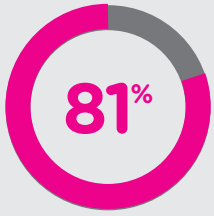
How satisfied are you with how you look in the mirror unclothed?



How satisfied are you with the size?



How satisfied are you with how natural your breasts look?



Strattice™ Tissue Matrix is a porcine product and processed to remove all cells. If you have religious concerns about the use of a porcine-based product, please consult with your local religious leader.

Strattice™ Tissue Matrix is a CE marked product.

The role of Lipomodelling

Lipomodelling is when fat is taken from one part of your body and injected in tiny amounts to other areas of your body to fill noticeable indentations in the breast, or to increase the size of the breast/adjust the shape after your operation.

The fat is taken from one part of your body using liposuction (usually from the thigh, buttocks or abdomen). It is then processed to remove unwanted tissue and the good fat cells are injected into your breast.

Lipomodelling can be done under local or general anaesthetia and may be needed several times before you reach your desired results.

Not all women should have breast reconstruction and/or lipomodelling, and you should speak to your surgeon about whether it is right for you.

Breast Reconstruction Techniques At a Glance

Autologous reconstruction:
Made from muscle, fat and skin (tissue) from other areas of your body.

Tissue matrix and implant reconstruction:
Uses a natural piece of tissue, giving your surgeon more tissue with which to work.

Implant-only reconstruction:
Places a permanent implant in the breast pocket without having to expand it first. This means a second operation is usually not needed.

Tissue expander-to-implant reconstruction:
This expands the muscle enough to make room for the implant size you choose.

Breast reconstruction operations can be the first step back to feeling like you, and it's important you know your options.

Here are a few things to be aware of after your reconstruction:

- Pain or discomfort
- Work and everyday activities - it's a good idea to have someone around to help you for the first few days
- Driving - you should be able to drive again after a few weeks
- Wearing a bra - there are no set rules, but go by what your surgeon says
- You may be too tired to shower but you can, with help if needed, and if you have the okay from your surgeon
- Women are variable in the length of time it takes for their energy levels to return to normal, but most will be well on the road to recovery in 6-12 weeks. Some are often a lot sooner.
- If you have drains, they may be taken out 7-14 days after an operation (in some cases, just 4-7 days after)
- Your stitches may be taken out in 7-14 days as well (although many surgeons use dissolvable sutures)
- It may take 1-2 years for your scars to fade, however regular moisturising can help (this is only recommended once the initial healing of the wound is complete)

You should expect at least one more operation to improve the look and feel of your new breast(s). You may also then have a nipple reconstruction and areola tattoo.

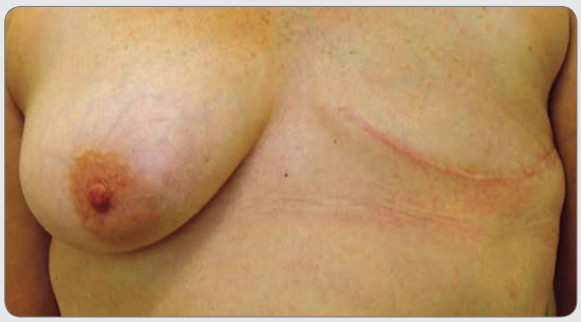
What you should know about recovery time

Your recovery time will depend on the type of breast reconstruction operation you have had. There is a good chance you will be out of bed within a few hours. In fact, you may be able to go home the next day. However, if you have had a longer operation, this may also take longer, and you may stay in hospital for several days.

A look at the before and after of Autologous Reconstruction

Delayed Latissimus Dorsi

Before



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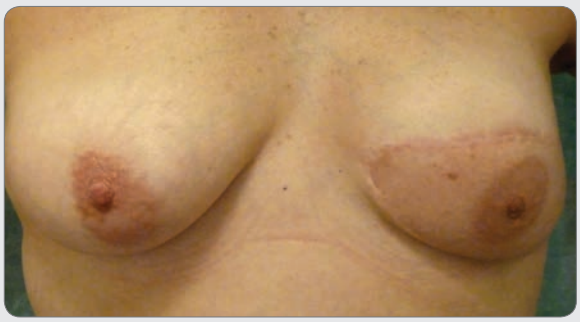
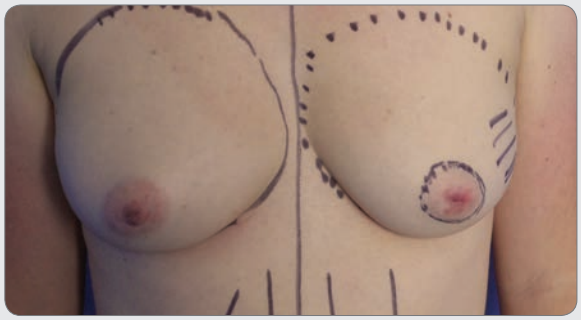


Immediate TRAM

Before



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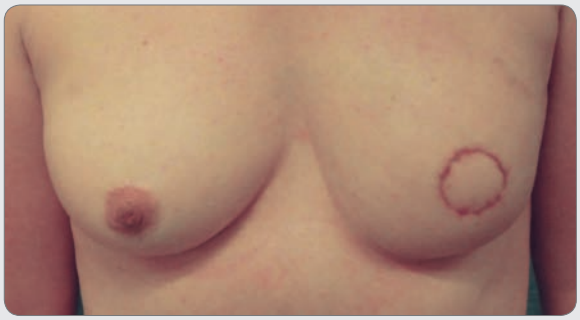
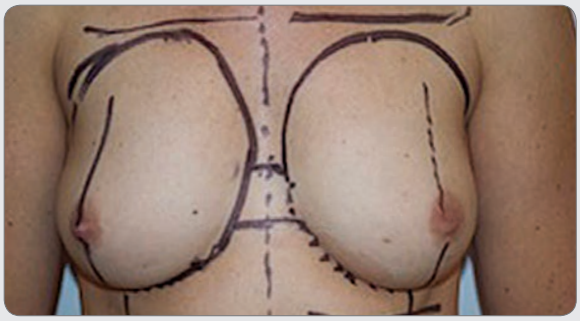


Photos courtesy of Mr. Sheikh Ahmad MB, MCh, FRCS, FRCSI, FRCS Eng

A look at the before and after of Reconstruction with Strattice™ Tissue Matrix

Immediate one-stage breast reconstruction after left-nipple-sparing mastectomy with Strattice™ Tissue Matrix

Before



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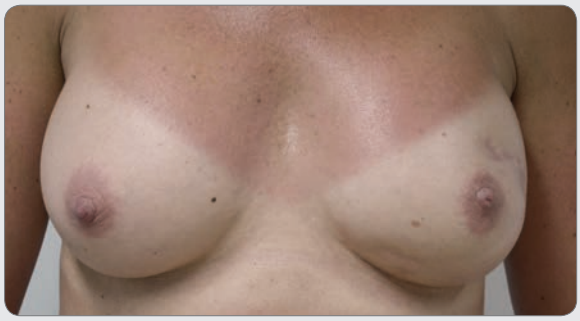
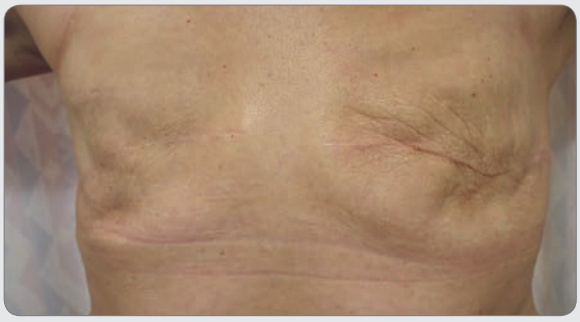


Delayed one-stage breast reconstruction with Strattice™ Tissue Matrix

Before



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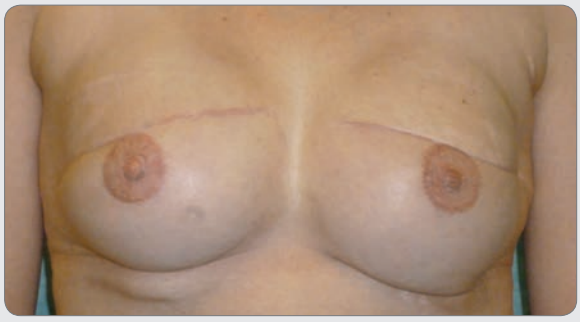

Photos courtesy of Mr. Sheikh Ahmad MB, MCh, FRCS, FRCSI, FRCS Eng

Questions you may have during a breast reconstruction consultation

- How will breast reconstruction impact my cancer treatment?
- What are all my options for breast reconstruction?
- Which reconstruction option is best for me, and why?
- How many operations and outpatient visits will I need?
- How long will my entire reconstruction take?
- What is the best result I can expect?
- Do you have before-and-after photos, for different procedures, that I can look at?
- What should I expect when I wake up after an operation?
- What will my recovery be like?
- How long will my recovery take?
- What are the potential risks and side effects?
- Can I choose to make my breast(s) smaller or bigger?
- How many and what kind of procedures do you do in a year?
- When will I be able to return to my normal routine?
- What will my scars look like?

Glossary of Useful Terms

Areola: The darkened area of breast around the nipple.

Autologous: Reconstruction made possible from the muscle, fat and skin (tissue) from other areas of your body.

Capsular contracture: Shrinking or tightening of the scar tissue around the breast implant, making the breast harden and may cause pain and discomfort. This is the most common complication seen after breast reconstruction surgery.

Chemotherapy: A chemical used to kill cancerous cells in your body.

Delayed breast reconstruction: When your breast reconstruction is performed in a separate operation on a date after the mastectomy procedure is complete.

DIEP (Deep Inferior Epigastric Artery Perforator) Flap: Flap reconstruction which uses fat and skin from the lower stomach, but does not cause removal of any muscle.

Exposure of implant: When the skin covering the breast is too thin, causing the implant to break through the skin.

Free Flap: When the skin, fat, blood vessels and muscle are cut from the original location and then attached to blood vessels in the chest.

Full muscle coverage: When muscles in the immediate area of the breast are used to fully cover and support the implant.

High-riding breast: When implants are too high on the chest wall.

Immediate breast reconstruction: When both the mastectomy and breast reconstruction are performed during the same procedure.

Implant: A prosthetic device used to recreate the breast shape following mastectomy. The most common type of implant is silicone.

Implant visibility: When the skin covering the breast is too thin, the implant may become visible through the skin.

Mastectomy: The surgical removal of all or part of a breast, usually performed as a treatment for cancer.

One-Stage Reconstruction: When the breast is reconstructed without the use of a tissue expander.

Partial muscle coverage: When the top part of the implant is covered with the chest muscle, leaving the lower portion of the implant unsupported.

Pedicle Flap: When a flap of tissue is attached to its original blood supply and the blood vessels are tunneled under the skin to the breast region.

Porcine: Derived from a pig.

Radiation therapy: Treatment with high-energy rays that damage cancer cells to stop them from growing and dividing, in order to stop the spread of cancer.

Scar tissue: Tissue that forms in your body as part of the natural healing process, but is typically less functional and not identical to the original tissue.

SIEA (Superficial Inferior Epigastric Artery) Flap: Like the DIEP flap procedure, this uses the lower abdominal skin and fatty tissue to make a natural, soft breast following a mastectomy.

Surgical drain: A tube used to remove fluids from a surgical site after an operation.

Tissue expander: A device like a balloon which is put under the skin and chest muscle. Your surgeon fills the expander over time (this can take up to several weeks) in order to stretch the skin and muscle over the breast.

Tissue matrix: A medical device derived from animal or human tissue.

Two-Stage Reconstruction: When the breast pocket is stretched with an expander and then an implant is put in place (up to several weeks later).

TRAM (Transverse Rectus Abdominis Muscle) Flap: When tissue is taken from the lower abdomen (abdominal wall) and moved into the chest.

Strattice™
RECONSTRUCTIVE TISSUE MATRIX

References:

1. NHS National Mastectomy and Breast Reconstruction Audit, 2011. A national audit of provision and outcomes of mastectomy and breast reconstruction surgery for women in England Fourth Annual Report 2011.
2. Patient survey carried out in UHSM Trust. Presented at ABS 2013, Manchester.

For more information on your options, and to see why breast reconstruction matters to other women, please visit **www.breastreconstructionmatters.co.uk** and speak with your healthcare professional.

TOUCHSURGERY

Download our free surgical technique app, "**TOUCHsurgery**", from the App Store and learn how Strattice™ Reconstructive Tissue Matrix is used. To begin, simply search **TOUCHsurgery** and start using it today.

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