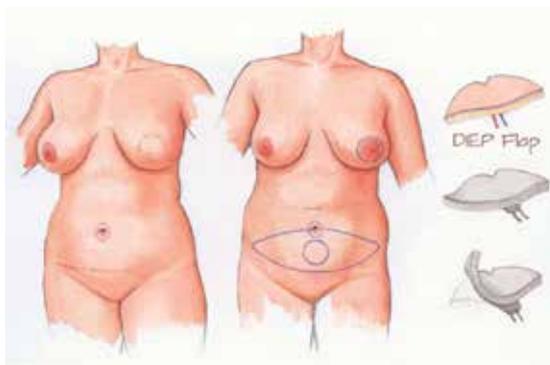


Deep Inferior Epigastric Perforator Flap Reconstruction (DIEP) (1 of 8)

What is it and how is it done?



This is a major operation, which takes a long time to do because it is a 'free flap'. This is where a piece of tissue (skin and fat), but no muscle, is cut from the lower part of your tummy. This tissue has a blood supply called the deep inferior epigastric perforator (DIEP). The flap is placed on your chest and the blood vessels are

joined to those in your chest. This gives the flap a blood supply, which will keep it healthy. Sometimes it will be necessary to use vein from your upper arm to improve the blood flow.

You may have some of your lymph glands in your armpit removed at the same time. It is an intricate operation, which can sometimes be an all-day procedure.

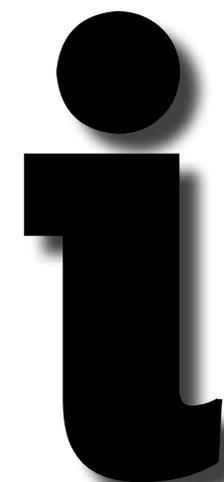
You will have a cut on your tummy from hip to hip just above the bikini line. The tummy skin is pulled downwards in this operation and your tummy button will be stitched back in place in its new position. There may be a few stitches around your tummy button, but all the other stitches on your tummy and flap are under the surface of the skin. They will dissolve over time.

The operation can be done directly after a mastectomy (immediate reconstruction) or years later (delayed reconstruction). The scars will be different depending on your type of surgery



Benefits of surgery

The aim of breast reconstruction is to give you a breast mound and a cleavage. When you are wearing clothes the world will be unaware that you have had a mastectomy. You will be able to wear bras and clothes of your choice without the worry of prosthesis (false breast) being seen, or falling out. However, when you have no clothes on, your reconstructed breast may not have the same appearance as your other breast.



If you need your information in another language or medium (audio, large print, etc) please contact Customer Care on 0800 374 208 or send an email to: customer care@salisbury.nhs.uk

You are entitled to a copy of any letter we write about you. Please ask if you want one when you come to the hospital.

Please complete The Friends & Family Test to tell us about your experience at: www.salisbury.nhs.uk/FriendsFamily or download our App from the Apple App store or Google Play Store.

The evidence used in the preparation of this leaflet is available on request. Please email: patient.information@salisbury.nhs.uk if you would like a reference list.

Alternatives

There are a number of ways to reconstruct a breast; any options will have been discussed with you by your surgeon. This leaflet has been written to give you information about this particular type of surgery. Alternatives to surgery will also have been discussed with you; if you need more information please contact the breast reconstruction nurses.

Will I need any more operations?

You may need more surgery, but this would not happen for at least 6 to 9 months after your breast reconstruction. You may want to have a nipple made or have your other breast made larger or smaller in order to get as close a match as possible in size and shape.

Arm care

Some swelling may occur in the arm on the side of the operation; this is because of the lymphatic system not working as well as before the operation.

The lymphatic system is a network of drainage channels, which clear waste products from the body tissues back into the bloodstream. It may not work so well after some lymph glands have been removed. The body tries to manage the problem by diverting some of the lymph fluid along other channels. However, sometimes the body cannot cope with this problem. Fluid will build up in the tissues and swelling will occur, this fluid build-up is called lymphoedema. Lymphoedema is 'managed' rather than 'cured' and this is done mainly with exercises and elastic compression garments to help to control the swelling.

It is important to avoid having the following routine procedures carried out on the arm of your affected side: (however, during this major surgery the cannulation of the affected arm is permitted)

- blood tests
- drips
- blood pressure readings
- injections.

Your breast reconstruction nurse will visit you on the ward and provide you with a post-operative arm exercises leaflet and will discuss these with you.

What are the risks and complications of this operation?

Flap failure

Occasionally the blood flow to the flap is blocked, causing some or all of the skin, fat and muscle to become discoloured and die. Further surgery may be needed to take away the dead tissue.

Infection

No matter how much care is taken to avoid an infection the possibility of this happening cannot be ruled out. Infections can be treated successfully with antibiotics. In severe infections the wound may 'pop apart' and dressings or even a skin graft may be needed to heal the area. Antibiotics will be given to you in theatre and after your operation.

Haematoma

Sometimes a collection of blood (haematoma) can form under the wound. To help reduce the risk of this happening you will have wound drains placed in the wound. These are soft plastic tubes placed under your breast and tummy slightly to the side. These drains will stay in place until they have drained less than approximately 30ml in 24 hours. You may be sent home with drains still in place in your tummy. Despite the drains being in place this collection of blood can still occur.

This can be treated in two ways:

- You may require a small operation to stop the bleeding; or
- Nothing will be done, but it will be carefully monitored by the nurses or the doctors.

Your body will reabsorb this blood over several weeks.

Excessive bleeding

You may possibly lose quite a lot of blood during the operation, which could make you feel very tired and become anaemic. A sample of blood will be taken from your arm and checked the day after your operation. If you are slightly anaemic you might need to take iron tablets for a week or two. A blood transfusion could be given, or you might need another operation to stop the bleeding.

Seroma

This is a collection of straw coloured fluid that collects under the wound as a result of the operation. The drains should help to prevent this, but if necessary a doctor or nurse can remove the fluid using a needle and syringe. Although the area can be quite numb it can be uncomfortable having this done. If you do develop a haematoma or a seroma you may have a thick dressing called a pressure dressing applied to try and prevent it from increasing in size.

Seroma is more common once drains have been removed and you are at home.

Deep vein thrombosis

This is caused by a blood clot forming in the leg veins. To help prevent this you should not have any long haul flights or long journeys in the 5 days before your operation and for 3 months afterwards.

You will have special cuffs around your calves to help prevent blood clots and you will be encouraged to be up and about as soon as possible. This is a very serious complication and if the blood clot 'breaks away' it can travel into the lungs and cause a pulmonary embolism, which can be fatal. To help prevent this happening you may be given a daily injection called dalteparin. This small injection causes the blood to take slightly longer than normal to clot and is given in the top of your thigh. Once you have been discharged home, you will have an oral blood thinning medicine which you need to take for the first 10 days after your operation.

Abdominal bulge/hernia

Avoid constipation. Which will causes abdominal pressure.

Please wear your support pants or tubi grip, for 6-8 weeks post-surgery. This will help support your abdomen.

Scarring

There will be scars from the operation on your breast and tummy, but your bra should cover the breast scars. When the scars have healed it is advisable to massage them gently with a moisturising cream to soften the scar tissue. All scars are red, raised and itchy in the early stages. Scars can take up to a year to settle and become fine white lines. In a few cases scarring may remain red, raised and itchy. This is called hypertrophic scarring.

Asymmetry

Asymmetry is when one breast is a different size and shape to the other. Further operations can be carried out to improve the result.

Coming into hospital

You will come into the Surgical Admissions Lounge on the day of your operation. Please bring:

- Nightwear, dressing gown and slippers
- Toiletries
- Small amount of money for newspapers, phone / TV card
- Fruit squash
- Books/magazines
- Any prescribed medication
- A good supporting bra is required. We recommend the Marielle bra which is sized in your usual dress size.
- Medium control, high waist supporting pants one to two sizes larger than your normal size.
- Lip balm

The supporting bra and pants will be worn night and day for 6-12 weeks.

Do not bring large amounts of money or jewellery with you.

Before your operation

You will be asked to come to the pre-admission clinic (PAC) where the breast care nurse or pre-admission nurse will explain the operation together with the plans for before and after your operation. She will ask you a lot of questions about your health and also answer any questions that you might have. It can help to have any questions you wish to ask written down beforehand.

You will also have the following:

- Blood test
- Swabs taken from your nose and groin to make sure that you do not have MRSA (methicillin resistant staphylococcus aureus)
- A photo of your chest and abdomen (tummy) taken by the medical photographer (this is for reference only).

You may also need

- Chest x-ray
- ECG (heart tracing)

You will be asked to sign a consent form either at this appointment or on the day of your surgery. This form means that you are agreeing to the operation and have been told all the risks and benefits. Read it carefully before you sign it. You will be given a copy of it for your own personal record. Remember you are free to change your mind about having the operation at any time.

Vascular Assessment

You may need to come in the day before your operation for a CT angio scan so that the blood vessels can be identified before the operation.

The Surgical Admissions Lounge

Before going for your operation, you will see the surgeon who is performing the operation. You will also see the anaesthetist, who will talk to you about your anaesthetic.

You may also be warmed with a warming blanket before your surgery.

Eating and drinking

You will be asked to have nothing to eat for at least 6 hours and nothing to drink for 2 hours before your operation. You will be asked to drink one protein drink at 10pm on the night before your surgery and two protein drinks at 6 am on the morning of your operation, if appropriate. This will have been discussed with you at the pre-assessment clinic appointment.

Going to the operating theatre

Before going to theatre you will be provided with a hospital gown and asked to remove your clothing. Any jewellery that cannot be removed will be taped to prevent it falling off during the operation. Please try to remove all rings as hands tend to swell due to the fluids given in theatre.

General anaesthetic

A general anaesthetic means that you are very deeply asleep during your operation. You will not be aware of anything. When you wake up you will be in the Recovery Area. You will stay there until you are awake enough to return to the ward. You may notice a mask over your face. This is to give you oxygen, which will help you recover from the anaesthetic. You may also be aware of nurses checking your 'flap' to make sure that it is warm, skin coloured and that it has a good blood supply. You will have a drip in the arm on your unaffected side. This is to keep you hydrated and will stay in place until you are feeling well enough to eat and drink as normal.

What else do I need to know?

Oxygen

You will initially have oxygen this will be provided by tubing and nasal prongs.

Warmth

Your flap needs to be kept warm to improve blood circulation. You may have a special blanket called a 'bair hugger', which circulates warm air over you, or you may have a thick gauze pad over the flap to keep it warm.

Wound drains

You will have one drain at either end of your tummy wound and 1 or 2 beneath your flap. A special bag is attached to each of your drains to collect any fluid draining from the wounds. The drains will be removed when they are draining less than approximately 30mls in a 24-hour period.

Wound dressing

You will have a minimal dressing (sometimes just surgical glue) around your breast mound, across your lower abdomen (over the umbilicus/tummy button) and at the top of your drains. Any dressings will be changed as necessary.

Urinary catheter

A plastic tube will be put into your bladder to drain urine into a measured drainage bag. This is done when you are in the operating theatre. This catheter is usually removed after the second or third post-operative day, when you are able to get out of bed and start to move around.

Electronic compression boots

These are attached to your lower legs; they will inflate and deflate in order to help prevent blood clots forming in your legs.

Enhanced recovery programme

We are trying to help patients recover more quickly. You will be given a leaflet about this programme at your pre-admission clinic appointment.

After your operation

When you return to the ward, the nursing staff will frequently check your flap, blood pressure and pulse. This is done to make sure that any early signs of bleeding or infection are dealt with as quickly and as early as possible. They will also check the wound areas to make sure that there is no excessive bleeding and will monitor the amount of drainage from the drains.

Any pain that you might have can be controlled by a variety of different methods. You will be given pain killers and to make your tummy more comfortable you will have a 'Pain Buster' attached which gives local anaesthetic into the wound. If you are not comfortable and the pain is not controlled, please tell the nursing staff.

You will be given oxygen by a mask over your nose and mouth or by nasal prongs, for a few hours or even overnight. This will help you recover from the anaesthetic.

Day 1

- The nursing staff will help you to wash and help you to put on your support bra.
- The doctors will see you.
- You will need to do your circulatory/deep breathing and arm exercises (ten of each every hour that you are awake). These exercises will help to prevent clots/chest infection and frozen shoulders. The nurses will explain how to do the exercises.
- You will also have compression boots attached to your lower legs to help prevent clots.
- You will have a blood test to make sure that there has not been too much blood loss during the

operation. If there has been you may need a blood transfusion.

- You will have a catheter (a tube into your bladder) which drains urine into a special drainage bag.
- Your flap will be checked regularly and your blood pressure, pulse and temperature will be taken frequently. If these observations are satisfactory the oxygen will be stopped.
- Medication will be given to control your pain.
- If you are eating and drinking your drip will be taken down.
- Your flap will be kept warm with a 'bair hugger' blanket.
- You will be encouraged to sit on the edge of your bed as part of the enhanced recovery programme and then your urinary catheter will be removed.

Day 2

- You will probably be able to wash your hands and face, but a nurse will wash the areas that you cannot manage.
- The doctors will see you.
- You may possibly sit out in a chair for a short time today and continue to do your circulatory/deep breathing and arm exercises. You need to be slightly stooped when you get up; this will stop you straining your tummy wound.
- Your flap, temperature, pulse and blood pressure will now be checked less frequently.
- You will be encouraged to wear your support bra and pants/tubi grip.
- Your urinary catheter will be removed.
- Some of your wound drains may be removed.

Day 3

- The doctors will see you.
- You will be able to walk to the bathroom, toilet and gently mobilise around your room in preparation for going home.
- More of your wound drains may be removed. Please check with your nurse if you can shower.

Each day you will find that you can do a little more, and hopefully you will feel more comfortable. Once the team are happy with your progress, you will be discharged home.

Discharge home

Exercises

Please continue to gently to mobilise continue and continue your circulatory/deep breathing and arm exercises. This will help prevent clots/chest infection and frozen shoulders. The breast reconstruction nurses will provide you with an arm exercise booklet. You must not lift any heavy objects or reach up for about 6 weeks after your operation. This would not only be uncomfortable, but you would be putting a lot of strain on your scars.

Dressings

Generally you will not have dressings. However, if you do they are generally water proof and you can shower daily. The pressure of the shower should be to your back.

Constipation

Constipation should be avoided as it causes abdominal pressure. It can result from inactivity, change in normal diet and as a result of taking codeine based pain killers. You need to drink plenty of water and other drinks throughout the day (about 1.5 litres) and eat plenty of fruit and vegetables.

Driving

Be a passenger in a car (rather than a driver) except for essential journeys such as clinic appointments for at least 4 weeks. Please check with your insurance company before driving again.

Medication

You will be given pain killing tablets to take home. Tamoxifen should be restarted when you are fully mobile usually at around 4 weeks post-surgery.

If applicable, you will be given a fitness to work note for your employer.

Work

We advise you to remain off work for at least up to 12 weeks, especially if your job involves lifting or carrying heavy objects.

You will be given an appointment in one week's time for a wound check in the Plastic Surgery Outpatient Department which is on Level 3.

If you enjoy sports, for example swimming, you may gently start again after 8 weeks. Discomfort will be the limiting factor.

It will take six months to one year for you to feel fully recovered. You will find that you tire easily and need more rest and sleep than usual. Ask family and friends to help you, then you will have more time to rest.

Scar Massage

The breast reconstruction nurse will advise you on how to massage your scars and when it is appropriate to do so. (This is usually at about six weeks post-surgery, once you have fully healed).

Any problems once you are at home

Contact Odstock Ward out of hours: 01722 336262 ext 3507.

Contact the Breast Reconstruction Nurses during the week 01722 336262 ext 3516 or
Plastics Dressing Clinic ext 3254