

Recovering after a DIEP breast reconstruction

Oncoplastics Unit

Patient information



We understand that undertaking cancer surgery might be a stressful period. To alleviate some of the stress on your mind and body, we recommend following the GEARS programme.

GEARS stands for:



Get up



Eat



Analgesia



Remove



Speak up

Introduction

This leaflet outlines your DIEP surgery, explains the Enhanced Recovery Programme and advises what you can do following your discharge home to assist your recovery.

Planning your surgery

Following your initial clinic appointment, you will need to have a scan of your abdomen to confirm that the vessels in the area are suitable to go ahead with the DIEP surgery. Your scan results will be checked at your clinic visit by one of the plastic surgery team who can explain the surgery and answer any questions you may have.

You will be asked to attend medical photography to have photographs taken for your records. A friend, relative or nurse can accompany you during the photography.

Your surgery date will then be arranged and the Plastic surgery co-ordinator will contact you by telephone to confirm your date.

Before your surgery, you will be given an appointment to attend the Admissions and Pre-operative Assessment Unit. At this appointment, we will carry out a blood test and ask about your allergies, past medical history and anything which may affect your surgery or recovery. Swabs will be taken to check if you require any treatment to reduce the risk of

infection following your surgery and you will be advised if decolonisation treatment is required prior to your surgery. You may be seen by an anaesthetist and have further tests arranged, such as an ECG.

Smoking increases your chances of having complications following your surgery, such as wound breakdown, chest infections and other health problems. The risks are reduced if you stop smoking as soon as possible prior to your surgery. Your pre-assessment nurse or Nurse Specialist will be able to give you advice to help you to stop smoking.

You will also be given advice on appropriate supportive underwear which is required following your surgery.

On the day of surgery – You will be asked to come to the Day Surgery Unit for 7.30 am at the latest on the morning of your surgery. You will be seen by your anaesthetist, surgical teams and the day surgery nurses to prepare you for your surgery.

The Enhanced Recovery Programme

The Royal Marsden has incorporated several steps into planning your operation which are designed and proven to help you in your recovery. These steps are known as Enhanced Recovery After Surgery (ERAS). Research shows that after surgery, the earlier you are out of bed, walking

around, and eating and drinking the faster your recovery will be, with a reduction in your chance of developing complications. As part of this programme, and in an attempt to simplify the information, we have developed GEARS and the GEARS checklist. There are five elements of GEARS which take place immediately after your surgery and which you will be actively involved in to improve your ability to recover quickly after your operation. Different patients can have very different expected courses of recovery, so there is no “one size fits all” process; therefore, it is important that we tailor your GEARS programme to your individual needs. Part of our aim with GEARS is to empower you to have greater control over your care and recovery.

The GEARS checklist is a simple set of targets which will help your clinical team communicate more effectively and will help you have a clear understanding of the expectations. It sets out daily targets for you to aim towards to help you get home safely and quickly.

The five elements of GEARS are:



Get up

You should be as active as possible before and after your operation. Our physiotherapy team will see you regularly and will help to tailor an activity programme for you. The overall aim is to help you to sit out of bed and take gentle steps around the ward as soon as the surgical and nursing teams are confident you can do so. Being upright is vital for the health of your lungs and helps to reduce the risk of developing a chest infection (pneumonia). Moving around will also improve your circulation, helping prevent blood clots (such as Deep Vein Thromboses) developing, and improve muscle tone, helping you get back to full strength sooner.



Eat

Leading up to surgery, it is important that you eat a varied diet that provides all the nutrients that your body needs. The Royal Marsden booklet *Eating well when you have cancer* provides information and ideas for meals and snacks. This is available from your Clinical Nurse Specialist, Outpatient Department, or Help Centre (PALS). After surgery, we will aim to get you back to a normal diet as soon as possible.



Analgesia

This is the medical term for pain relief. We need to ensure that you are on the appropriate medication at each stage following surgery to keep you comfortable, but without significant side effects. You must be comfortable enough to breathe deeply and cough after your operation, as not doing so can increase your risk of developing a chest infection. Your team will assess your analgesia plan every day with a view to gradually reducing it as you recover. However, you must feel confident to discuss this with them either if you need more analgesia, or perhaps if you would like to reduce the dose faster.



Remove

This element is a reminder to you and your team to look at anything which should be stopped before your operation (such as some medications), or removed afterwards. Examples of items which can be removed after surgery include any drip lines or drains. Each day your team will assess whether these are still required. The sooner these are removed, the sooner you will be able to sit out of bed and move around, helping you to regain your strength and independence. You will have a urinary catheter when you first return from theatre. This will also be removed as soon as possible to prevent infections and help you move around.



Speak up/ Safe discharge

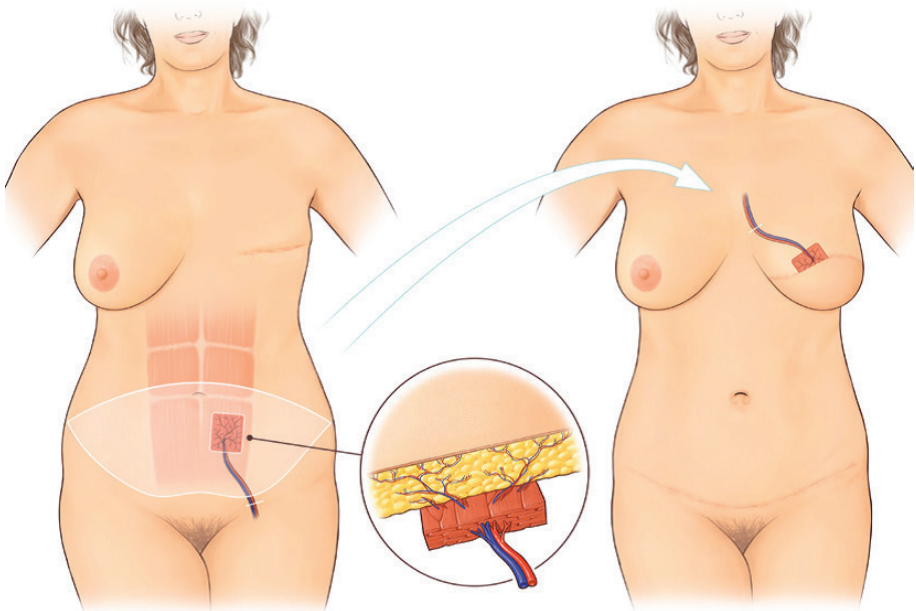
This element is specifically for you to voice any concerns or questions you have to your team. When they are going through their daily GEARS checklist, they should ask for your input. Your team will then have a better understanding of you, and you will feel more engaged with your recovery progress. Feel free to ask any question no matter how trivial you think they are. Patients receive a huge amount of information before and after their surgery and it can be difficult to remember it all. Planning for when to leave hospital also starts before your operation. If there is anything which you feel may make it more difficult for you to leave hospital or to cope with when you get home, please let us know. We will give you our best estimate as to how long you are likely to stay in hospital so that you can plan ahead. Please ensure you speak up if you have any worries or concerns.

What happens during the surgery?

The DIEP (Deep Inferior Epigastric Perforator) breast reconstruction uses a free flap piece of tissue from your abdomen which is made of skin and fat. The tissue is transferred to your chest and the artery and veins are connected to blood vessels in your chest wall using microvascular surgery, which is a specialised plastic surgery technique. The tissue is then shaped into a breast. You will have a patch of skin from your abdomen visible on your breast which will be used to monitor the tissue and make sure that your new breast is healthy.

This diagram illustrates a breast reconstruction using a free lower abdominal flap. A large flap of skin and fat from the lower abdomen is raised along with the blood vessels that keep it alive.

In this case, a small portion of muscle has also been taken (TRAM flap). In some cases it is possible to take blood vessels without taking any muscle (DIEP flap). The flap is transferred to the chest to replace the missing skin and volume. The blood vessels of the flap are joined microscopically to blood vessels in the chest to restore the blood supply to the flap.



Following your surgery, you will have a catheter in your bladder, so you do not need to get out of bed to pass urine overnight. You will have anti-embolic stockings and flowtron boots, which inflate intermittently to help reduce the risk of you developing clots in your lower legs (DVT). There will be a warm electric blanket to help with the blood flow to the flap in your new breast. You will be given plenty of pain relief medication to ensure that you are comfortable and not in pain.

You may have drains to your breast / axilla (underarm) and your abdomen. Your scars will have absorbable sutures and glue to protect them and they will be covered with dressings.

The evening following your surgery, you will be drowsy but awake and talking – you may have a visitor if you would like to. The nurses will check you regularly over the first night to ensure that the flap in your new breast is healthy with a good blood supply. If there are any concerns with your new flap, you may be taken back to theatre so that this can be resolved. You are able to drink water over night and can then eat and drink normally after you have been checked by the Plastics team the following morning.

It is important that you do not lay flat following your surgery and you sleep on your back propped up in bed with your knees bent, to take the tension off your abdominal wound. The nurses will assist you to put on your supportive bra.

After your surgery

Day 1

The morning after your surgery will be spent resting in bed, recovering. The warm blanket and flowtron boots will be removed. In the afternoon, the nursing staff and physiotherapist will assist you out of bed. If you are able to walk to the bathroom at this time, your catheter can be removed. The early removal of your catheter will reduce the risk of you developing a urine infection. If you have a pain control pump this may be stopped and changed to oral painkillers. Regular oral painkillers such as paracetamol and ibuprofen can be very effective and do not have the side effects of morphine-based medication, such as nausea and constipation. The nurses will continue to check your new breast regularly. If you do not have drains in your abdomen, you should wear supportive pants to protect the wound.

You will be given an injection each day to help prevent you from developing a deep vein thrombosis (a blood clot known as a DVT). You will be given more injections to administer when you leave hospital.

Day 2

Your catheter will be removed and you will be encouraged to walk to the bathroom unassisted. You will be able to shower – your dressings can be patted dry or dried with a cool hairdryer. If you have drains, they may start to be removed if the volume of fluid is low enough. The physiotherapist will help you to mobilise and give you exercises.

Laxatives will be prescribed for you as the medication following surgery and reduction in your mobility may make you constipated. The nurses will continue to check your new breast regularly.

Day 3-5

You will be encouraged to increase your mobilisation around the ward and on the stairs. When your drain volumes are low enough these will be removed (if they have not been removed already). Your surgical team will advise when you are able to be discharged home. Sometimes when the volume of a drain is high, you will be discharged with a drain and asked to measure the fluid daily. You can return to the hospital for it to be removed when the levels are low enough. The ward nurses will show you how to manage your drain. It is important that you wear your supportive bra and pants all the time, although they can be removed when you shower. It is also important that you continue with regular pain relief and laxatives – a supply of these, together with your blood thinning injection, will be prescribed for you to take home.

Going home from hospital

Following your recent surgery, when you leave the hospital you should try to rest, however daily gentle exercise (walking) is important and will reduce your chance of developing a deep vein thrombosis (DVT). **You should continue to wear your supportive stockings until your mobility is the same as it was prior to your admission.** Ease yourself gently back into your daily routine as you feel able. You must remember that you have had major surgery and that your body is still recovering from the effects of the anaesthetic as well as the surgery.

In the early days following your operation, your body will need a vast amount of ‘internal’ energy to repair itself. This leaves you with small amounts of energy for the rest of the day. After each activity you carry out, you may find your energy levels dipping and you may need a rest while your body recovers. As the days and weeks pass, your energy store will increase so that after six to 12 weeks you will have returned to your normal daily pattern. During this time, you may find you have a good day when you appear to have lots of energy. This may be followed by a couple of days when you feel tired and sometimes tearful – this is normal.

You may resume gentle exercise following the consultation with Plastic surgeon. Until then, you should avoid anything that causes you to strain.

There are no restrictions to having sex from a medical point of view. Coping with breast cancer and its treatment can be physically and psychologically demanding, and you may well feel tired. You may not feel any desire for sex for a while – this is normal.

You should completely avoid using hot water bottles or heat pads on your full breast or abdomen both during the healing stage and once the skin has healed. The skin may look normal, however there may be altered sensation in the area which can result in significant burns.

In addition:

- We advise you not to drive initially after your surgery, but please ask about resuming this at your first outpatient appointment
- We advise you not to smoke after your operation as smoking will increase the risk of complications
- You should not return to work until your plastic surgeon advises you to. This could be up to eight weeks, depending on the nature of your work.

Looking after your wounds

Your wounds have been closed with dissolving stitches which will take several weeks to dissolve. The threads at each end of the wound may need to be trimmed at your outpatient appointment. The tape dressings which will be on your wounds when you go home will stay there until your outpatient appointment. You may shower over this and pat it dry, or dry the tape using a hairdryer on a cool setting. Your scars will improve within a few months of surgery. They may be a little more pink or dark (depending on your skin tone) and noticeable, even red and lumpy temporarily, before they start to fade. Scars may stay pink or dark for up to nine months before they fade. Scars usually become fully mature and fade 12-18 months after an operation. The use of other scar treatments, such as silicone tape, can be discussed with your Plastic surgery team.

Protect scars from sunlight or any ultraviolet (UV) light until they have completely faded, by applying a total sun block to the affected area when exposed. Your outpatients nurse will explain how best to minimise scarring at your follow up appointment.

You will be wearing a supportive bra before you leave the hospital. This should be worn day and night for four weeks and only removed for showering. Underwired bras should be avoided at this time. After four to six weeks, if your wounds are completely healed, you may be measured for a properly fitting bra. We may also advise you to wear some supportive pants when you go home, to support your abdominal scar. These may be worn for up to six weeks.

To help your wounds heal, we advise the following:

- Sleep on your back, propped up in bed with a few pillows for the first two weeks following your surgery. This will help to prevent further swelling and will help to take the strain off your abdominal muscles. A couple of pillows under your knees may also help. If you are doing this, remember to move your legs and ankles regularly to reduce your chance of getting a deep vein thrombosis (DVT).
- Ensure that you are having a varied diet with adequate vitamins and minerals which are needed for wound healing. Please see The Royal Marsden booklet Eating well when you have cancer for suggestions and recipes.
- Avoid straining or lifting heavy objects for at least six weeks after surgery.

- If you find it uncomfortable to laugh or cough, support your scar with a folded towel held against your abdomen.

Possible problems following surgery

Seroma (common)

Following surgery, the body produces excess fluid (serous fluid). Wound drains can help remove some of this excess fluid. When the drain is removed, the fluid may still form and produce a swelling around the wound. This swelling is known as a seroma. A seroma is not a serious problem and it will all reduce with time. Occasionally, the body can produce a large amount of fluid which can make the area quite swollen. Dealing with a seroma is never an emergency. Generally nothing needs to be done unless you are particularly uncomfortable. Please tell your nurse if this happens.

Wound infection (rare)

This can happen after any operation. If you get a wound infection, the wound becomes red, hot and painful. You may feel generally unwell and have a raised body temperature. Call us urgently if this happens, as you may need a review or a prescription for antibiotics.

Bruising (very common)

Bruising is very common after breast surgery as the breast has a very good blood supply. Bruising may appear some days after the surgery. Generally nothing needs to be done as it improves over a period of a few weeks.

Haematoma (rare)

A haematoma is a collection of blood around the wound area. It is caused by bleeding from a small blood vessel within the wound. If this happens, it will usually be within 24 hours of surgery, although occasionally it can happen up to 10 to 14 days later. A haematoma can be quite firm to touch and blood may ooze from the wound. If this happens, you may need to return to theatre to have the collection of blood removed. If you have been discharged from hospital, you should seek medical attention urgently by contacting The Royal Marsden Macmillan Hotline.

Pain (common)

There is usually discomfort rather than pain. If you had surgery in the armpit at the same time as the main DIEP surgery, this can sometimes be more uncomfortable than the breast itself. Simple pain relief tablets or anti-inflammatory tablets (if these are suitable for you) taken on a regular basis should be sufficient to relieve the discomfort. Pain

management is much easier if treated earlier rather than later. If you are struggling, please contact us (see page 16 for contact details).

Change in sensation and numbness (common)

During surgery, some of the nerves will be cut or bruised. You may become aware of numbness, loss of sensation or heightened sensation around the operation site, at the side of your chest or the underarm. This is quite normal and may improve with time.

Possible complications

If you experience any of the following, please contact The Royal Marsden Macmillan Hotline:

- Any concerns about your new flap
- Signs of redness around your wound area
- High temperature
- A burning sensation around your wounds
- Increasing pain, swelling or bleeding at the site of your operation
- Leakage from the wound which may be a malodorous / yellow fluid (pus).

Notes and questions

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This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from: The Royal Marsden Help Centre
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Email: patientcentre@rmh.nhs.uk

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Contact details

The Royal Marsden Macmillan Hotline: 020 8915 6899

(Available 24 hours a day, seven days a week)

Please contact your Specialist Nurse if any problems occur or if you would like further advice.

Clinical Nurse Specialist, Plastic Surgery:

020 7811 8318 (NHS)

020 7352 8171 Ex 1573 (Private care)



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