

Skin Grafts and Donor Sites

Pre-Operative Information

This leaflet explains about skin grafts and donor sites, including the benefits, risks and any alternatives and what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is a skin graft?

A skin graft is an operation where skin is taken from one area, known as the donor site, to repair another area of the body, known as a recipient or skin graft site.

The skin is made up of two layers, the epidermis (top layer) and the dermis (bottom layer). A skin graft takes all the epidermis and varying depths of the dermis. If all the dermis is included in the skin graft it is called a full thickness skin graft (FTSG). If only part of the dermis is taken it is called a split thickness skin graft (SSG).

When you have a skin graft operation you will have two wounds: the area to which the skin graft is applied, i.e., the recipient site/skin graft site, and the area from which it is taken: the donor site.

A full thickness skin graft donor site will be closed with stitches and is usually dressing free after a week. A split thickness skin graft donor site is like a graze and this heals with dressings in about three to four weeks.

The surgeon will inform you whether you will have a full thickness skin graft or a split thickness skin graft.

Why should I have a skin graft?

Skin grafting is a technique used in plastic surgery to restore skin integrity in wounds that are unable to be closed directly. It is one of the simplest forms of reconstruction.

There are a variety of reasons why you may need a skin graft. Skin grafts can be used to reconstruct:

- traumatic injuries such as burns and degloving (when the skin layers shear off)
- after skin lesions are removed due to skin cancers
- deformities such as scar contractures (scar tightness)
- following surgical debridement of non-viable (dead) tissue or to help the wound to heal more quickly.

What are the risks?

This procedure is safe but there are some risks associated with all operations:

- Bleeding from the skin graft site. A small amount of bleeding is expected but should stop. Bleeding is routinely monitored directly after the operation. Continuing bleeding can result in a collection of blood under the skin, known as a haematoma. Occasionally the bleeding can continue and although rare, a patient may have to return to the operating theatre for the plastic surgeon to explore the wound and stop the bleeding.
- Bleeding from the donor site. This is expected especially in the first seven days. Plenty of absorbent dressing is used post-surgery to manage the bleeding. Occasionally the donor site continues to bleed through the dressings and leaks. In this situation the top gauze layers need to be removed, new gauze / pads applied and then secured with Mefix / Hypafix (tape). This can be done either by your local community /

practice nurse or by calling the Plastic Dressing Clinic nurses using the number at the end of this letter to arrange an appointment. If neither area can offer an appointment, you can attend your local walk-in or urgent care centre.

- Infection. Signs include redness, swelling and discharge (oozing) excluding blood, that smells and a raised body temperature. This is treated with antibiotics.
An infection can prevent the success of the skin graft.
- Skin graft failure. This is when the skin graft has not taken up the blood supply and has not stuck down to the area to which it is applied. This can occur if there has not been constant continuous contact of the skin graft to the wound site due to a build-up of fluid / blood between the wound and the skin graft or if there has been a shearing force against the area, for example if the dressings have slipped. This can result in partial or complete skin graft failure. Infection can also result in skin graft failure. In these situations, you may lose some or all the skin graft. If this happens the failed skin graft recipient site is managed with dressings and the wound will most likely take longer to heal. It is very rare that a second skin graft is done even if all fails. It is quite common for some areas of the skin graft not to take.
- Slow healing of the donor sites. Although most split thickness skin graft donor sites should heal in three to four weeks, some donor sites are slow to heal. This will be managed with continuous dressings until healed. Full thickness skin graft donor sites are stitched together so are usually dressing free in one to two weeks unless there is delayed healing. If this happens it will be managed with dressings until healed.
- Pain. Any operation site can be painful but should be controllable with painkillers. A split thickness donor site can be very painful as it is like a large graze. The pain can be managed

by ensuring you are receiving the right painkillers and ensuring you take them regularly instead of waiting until the pain is severe.

- **Altered sensation.** The skin around the skin graft and donor site may be numb or hypersensitive at first. The numbness or hypersensitivity usually fades over the following weeks but can take up to two years. Sometimes numbness or altered sensation can last longer or be permanent. Scar massage can help to improve the altered sensation.
- **Scars.** Both the skin graft site and the donor site will leave a permanent scar and skin discolouration. The scars may be a different colour from the surrounding skin and lumpy and will take a minimum of 12 months to settle down. There is a chance the scar will stay raised and noticeable. When all areas have healed and the dressings have been removed you should wash and dry the area normally. You should also moisturise and massage the scar twice a day with a non-perfumed cream (e.g., E45, Diprobase or a cream you routinely use to moisturise your skin) as this will help the scars to soften and fade. Scars are more sensitive to sunlight therefore lifelong protection against the sun's UV rays with a high protection sun cream is advised.

Are there any alternatives?

The surgeon has decided the best option for you is a skin graft. However, you can discuss with your surgeon or nurse the possibility of allowing the wound to heal by itself (which is referred to as secondary intention healing) using dressing management alone. This would mean the wound would take much longer to heal.

How can I prepare for a skin graft?

This operation can be done under a general or a local anaesthetic. If you are having a general anaesthetic, you will be sent an appointment to have a pre-operative assessment to ensure you are

safe to undergo a general anaesthetic. At this appointment you will be advised of any changes you need to make before the operation such as changes to the medication you take, e.g., the need to stop or continue blood thinning medication.

Information concerning your admission will be sent to you by post or by text. You will usually be given two weeks' notice of the date of the operation. This time allows you to plan for your recovery time after the operation. This information will include whether you should not eat or drink prior to the operation (fast) and if so, for how long you should fast before the procedure.

Please ensure you bring any regular medicines or inhalers into hospital. If you smoke, we advise that you stop smoking before the procedure as this delays the healing process. You can obtain smoking cessation advice from your GP or the hospital. It is important to eat a good balanced diet before your surgery as this will help with wound healing.

You are advised not to drive after this surgery. Recovery times and activities after surgery are dependent on where the skin graft is and the type of skin graft you have had. Please refer to information under the section titled 'What do I need to do after I go home?'

You should arrange some support at home with tasks such as shopping, cooking, childcare etc. after the operation. It is important to rest to aid your recovery. Please ensure that you arrange for someone to take you home.

Asking for your consent

It is important that you feel involved in decisions about your care. For skin graft surgery you will be asked to sign a consent form to say that you agree to have the surgery and understand what it involves.

You can withdraw your consent at any time, even if you have said 'yes' previously.

Consent must be obtained by the surgeon for the removal, storage or use of 'relevant material' which in this case is your skin. Following your skin graft surgery any leftover / unused skin is discarded in a special clinical waste bin. It is very rare that leftover skin would be stored. However, if there was a decision to store unused skin, St George's Hospital has the facility to store unused skin in a dedicated skin refrigerator.

In the unlikely event that your surgeon decided there was a need to store your unused skin, this would be explained to you prior to the procedure. Your consent to specifically store your skin must be obtained before this can occur. The procedure for the use and storage of skin and other body parts is governed by a legal framework called the Human Tissue Act, for which there are codes of practice which ensure that patient's consent is obtained, correct patient history and blood test are undertaken, stored skin is correctly labelled, safely stored and how we dispose of it. Any skin not used after 48 hours is discarded. Further information can be accessed here <https://www.hta.gov.uk/>

If you are asked to consent to having your skin stored and require further explanation, please ask your surgeon.

What happens during a skin graft operation?

You will be admitted on the day of surgery via the Surgical Admission Lounge (SAL) or Day Surgery Unit (DSU). If you are staying overnight, you will not know the ward to which you will return after the operation as beds on wards are allocated as they become available.

If you have been told that you are going to be an inpatient, for more information go to “your hospital stay – our inpatient services” via <https://www.stgeorges.nhs.uk/patients-and-visitors/patient-information/>

Staff in SAL or DSU will note down a contact name and number of a person they can contact after your operation to provide them with information about which ward you are on or when you are ready to be collected. Any patient with more complex health needs such as certain types of medication or diabetes may be admitted the day before the operation. All this information is sent to you beforehand.

A skin graft procedure normally takes between one to two hours but can vary depending on size of area being grafted. It may be done under a local anaesthetic (where only the area of surgery is numbed), a regional anaesthetic (where a section of the body is numbed) or a general anaesthetic where you will go to sleep for the entire procedure. For more information on anaesthetics refer to link <https://www.nhs.uk/conditions/anaesthesia/>

During the operation the surgeon removes the layer of skin required using a scalpel, knife or a special machine called a Dermatome. The skin may then be meshed or fenestrated which is when many small holes / incisions are made in the skin graft to allow fluid to drain from underneath it and to enable the skin graft to be stretched to cover a larger area. The skin graft site is dressed and usually staples or stitches are used to help secure both the skin graft and dressing to the surrounding skin. The donor site is managed differently depending on the type, a full thickness donor site is pulled together with stitches. A split skin graft donor site is dressed and allowed to heal by secondary intention (gradually from the base upwards and from the edges).

Will I feel any pain?

You may have pain from your skin graft site for approximately two weeks. Take regular pain relief and elevate the area if it is located on a limb to help with this.

If you have a split thickness donor site, the wound is like a deep graze and may be painful for seven to ten days after surgery. Try to avoid lying on the area and take regular pain relief as required. A full thickness skin graft donor site can also be painful and tight initially and you may also need to take pain relief to help manage this.

What happens after I have my skin graft?

You will initially recover from your anaesthetic in the recovery area of theatre and then either be discharged home the same day once the anaesthetic has worn off or go to the ward for further recovery and stay in for as long as is medically necessary. Your nurses will check your observations and when you are alert, they will first allow you to drink fluids and then if you feel comfortable and tolerate the fluid, they will allow you to eat.

When you leave hospital:

- Someone must drive you home from hospital.
- Make sure you have been given your discharge summary, information for your follow up appointment in the Plastic Dressing Clinic or with the consultant and telephone contact numbers at the hospital.
- Make sure you have all the medicines you need and know how and when to take them.

What do I need to do after I go home?

Advice on recovery depends on the area to where the skin graft was applied and from which it was taken. The success of a skin graft is assisted by ensuring the graft stays in continuous close contact to

the area where it was applied.

- A general guide is to plan for at least a week's rest until your Plastic Dressing Clinic (PDC) appointment. Further rest may be needed depending on the size and place of the graft, which will be discussed with you at each dressing change.
- Arrange for someone to assist you with housework, shopping, laundry and childcare for at least that first week, perhaps longer.
- Avoid any actions that could dislodge the skin graft out of place e.g., anything that increases swelling, friction (rubbing), knocking or moving the dressing.
- Keep the areas dry.
- If possible, elevate the area where the skin graft was applied as this helps to reduce swelling which can damage the skin graft.
- **Do not** smoke as this will delay the healing process and increases the risk of infection. You can obtain smoking cessation advice from you GP.
- **Do not** drive for two weeks or until the wounds have healed and you have no pain. If the skin graft is on the arm, leg, back or abdomen this may be longer. The nursing or clinic staff will discuss this with you. You must not drive yourself until the team tells you the skin graft is stable enough as it may damage the skin graft if you do. The operation may affect whether you are covered by your insurance. Even when you are advised your wounds are healed enough to return to driving, you should contact your insurance company to check you are still covered.
- **Do not** go back to work for at least a week. This may be longer for larger skin grafts and those on the arms and legs. The amount of time you need to be off work depends on the type of job you do and how quickly you get better. You can discuss this with the PDC nursing staff or with your GP.

- Avoid sports and exercises regimes for at least two to four weeks. Discuss this at your follow up appointment with the PDC nursing staff or your GP

In addition to the above, specific advice for parts of the body are as follows:

- **Skin graft on the face or neck.** You may find that you experience swelling post operatively – avoid lying too flat. Sleeping with a few extra pillows can help to reduce the swelling in the first week.
- **Skin graft to the back or flank (body).** Avoid lifting anything heavy or overstretching for three to four weeks. You should also try to avoid lying directly on the area if possible. Avoid tight clothing that rubs against the dressings.
- **Skin graft to arms, hands, legs or feet.** Skin grafts to these areas will need at least two weeks' rest. The nurse in clinic will advise you regarding your progress. You need to keep the limb elevated (raised) as much as possible (above your heart for the hand). This is important to help the skin graft to stick to the area where it is applied and to reduce swelling which can be harmful to the skin graft. Methods to elevate a limb include using a pillow / cushion to elevate an arm; for your leg or foot use a stool or elevate it on a couch. If the graft is on your leg or foot you will need to elevate (raise) the leg / legs whenever you sit down, including during car journeys.
- Although you must elevate a limb and rest you also need to balance this with ensuring you keep moving around your home and take gentle exercise to stop your joints getting stiff and to help prevent any blood clots. Make sure you have a healthy diet and drink plenty of fluids to help your wound heal.

How do I look after my wounds?

You will have two wounds: the skin graft site (recipient site) and donor site (from where the skin was taken).

The skin graft site

This will have a firm dressing applied and this should be kept dry until your visit to PDC. Although there may be bruising around the area if this is exposed it should not be red and inflamed.

This dressing should not have an offensive smell.

If you notice excessive bleeding, oozing of other liquid or an unpleasant smell, please contact the PDC for advice or out of hours attend St George's Emergency Department (ED).

The donor site

This varies depending on whether it is a full thickness or split thickness skin graft.

- **Full thickness donor sites** are directly closed with stitches. These may be under the skin and dissolvable or ones that will need removing. This type of donor site will have a simple dressing that can remain in place until you attend PDC.
- **Split thickness donor sites** are like having a big graze. This type of donor site bleeds and produces a large amount of fluid so needs a bigger dressing in place. It can bleed for the first few days and be very painful. If it leaks through the dressing, please contact PDC or your GP surgery or an urgent care centre who can assess and redress the wound.

Will I have a follow-up appointment?

You will be given a follow-up appointment for a wound check five to ten days after the operation in the PDC.

PDC is not a walk-in clinic so if you have not received notification of your appointments with a specific date, time and

venue within three to four days of your discharge, please contact the appointment line on 020 8725 0007, please note you often have to hold on for long periods of time. Alternatively, contact the DSU or ward you were discharged from.

You may need further follow up appointments in PDC, but these will be arranged at your first PDC review. You will also be given an appointment to see your consultant four to six weeks after your surgery.

If you have not received an appointment by four days after discharge, please contact the ward from which you were discharged or plastic surgery appointments on 020 8725 0007.

Useful sources of information

<https://www.nhs.uk/conditions/plastic-surgery/what-happens/>
www.bapras.org.uk/public/patient-information/reconstructive-surgery

Contact us

If you have any questions or concerns, please contact the PDC voicemail on 020 8725 0473 from Monday to Friday 9am to 4pm and leave a message or email Plasticdressing.clinic@stgeorges.nhs.uk
For plastic surgery appointments, contact 020 8725 0007.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you advice and information when you have comments or concerns about our services or care. You can contact

the PALS team on the advisory telephone line Monday, Tuesday, Thursday and Friday from 2pm to 5pm.

A Walk-in service is available:

Monday, Tuesday and Thursday between 10am and 4pm

Friday between 10am and 2pm.

The Walk-in and Advisory telephone services are closed on Wednesdays.

Please contact PALS in advance to check if there are any changes to opening times.

PALS is based within the hospital in the ground floor main corridor between Grosvenor and Lanesborough wings.

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS UK

The NHS provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

