What is a Skin Graft?

Surgery for skin cancer involves removing the affected area and some of the surrounding healthy skin. If the wound is small and the skin near to it is loose, the wound edges can be brought together and closed using stitches. If this is not possible, the wound may be repaired using a skin graft. A skin graft is a piece of skin taken from another part of the body (donor site) and used to cover the wound (graft site).

Types of skin graft

Skin grafts can be either:

• Full thickness.
• Split thickness.

Skin is made up of two layers: a thin outer layer called the epidermis and a thicker inner layer called the dermis.

Full thickness skin graft (FTSG)

A FTSG is where the epidermis and full dermis layers are included in the graft. This is taken from an area of the body where there is excess skin and then the edges of the donor site are stitched together. This type of skin graft is limited by the availability of suitable donor sites and is generally used to cover smaller wounds. Common donor sites are the areas in front of and behind the ears, the neck, inner side of the upper arm, groin and the abdomen.

Split thickness skin graft (SSG)

A split skin graft includes the epidermis and only part of the dermis. The deeper layer of the dermis is left at the donor site. This type of skin graft is generally used to cover a larger wound. The skin is shaved from another part of the body, usually the thigh, buttock or upper arm. The donor site resembles a large graze which slowly heals over 10 to 14 days.

How is the graft taken?

You may have either a general or local anaesthetic depending on the area being grafted and your general health. Most operations for skin cancer are under local anaesthetic. The skin to be taken (donor site) will be made numb by either an anaesthetic cream or with an injection. The area requiring the skin graft will also be anaesthetised using an injection. This may feel uncomfortable. You should not feel any pain once the procedure is underway. If you do please tell the surgeon, who will stop operating and administer more anaesthetic.

• Split skin grafts are taken from the donor site using either an instrument called a dermatome or a scalpel blade. This leaves a raw area that will heal over 10 to 14 days. During the healing process the donor site is covered with a dressing, which is usually left in place and kept dry until the site has healed.

• Full thickness skin grafts are cut out of the donor site and the wound that is left behind is stitched closed. The donor wound usually takes 5 to 10 days to heal. The surgeon or nurse will arrange for the stitches to be removed if necessary. The skin graft is used to cover the area where the cancer has been removed.

Skin grafts may be fixed in place by a variety of means including stitches, clips, medical grade glues and dressings. A firm dressing is often used to keep the graft in place while the graft heals. The skin graft will connect with the blood supply from the area and this allows it to ‘take’ and survive. This usually takes 5 to 7 days. If the graft is near a joint on the upper or lower limbs a plaster splint may be used to keep the area immobile until the graft has ‘taken’.

Changes of dressing and assessment of the graft will take place in Dr Vrtik’s rooms, usually between five and eight days after the operation.
**What will happen after the surgery?**

Following the procedure you may be allowed to go home but some people may have to stay in hospital overnight or for a few days. There are many factors that influence this and we will explain the particular reasons in your case.

Once home the following points are very important:

- You will need to take things gently for the first two weeks to allow the graft to heal properly. The graft is quite fragile, so it is important not to rub or knock the graft or dressing.

- If your graft is to the leg you should be driven home from hospital with your leg elevated on the back seat of the car. When you are at home you should keep your leg raised, so that your ankle is at least level with your hip, whenever possible for at least the first week after your operation. When sitting down keep your leg raised on a foot stool or another chair. Raise the foot end of your bed by a couple of inches, if possible. Stand for short periods and only when absolutely necessary. Walking should be minimised, and limited to toileting and short distances around the house only.

- If the graft is on your head avoid bending over with your head down below your chest for a few days as this may make the wound bleed. When in bed, avoid lying on the wound area or completely flat. You may experience bruising and swellings around the area, particularly if the wound is near the eye. This usually settles within the first week, though it may be quite alarming at first.

- If your graft is on your hand or arm, avoid over use of the limb for at least the first week. Do not lift heavy objects. You may be given a sling to help keep your arm raised as much as possible. We will tell you how much movement you can do.

- If your graft was on any other area of your body, keep it dry and avoid lying on the area. Specific instructions may be given to you by us. Avoid any kind of exercise that might stretch or damage the graft for a few weeks. You might need to take some time off work, depending on where the graft is and the kind of work you do; we will advise on this.

**Pain**

You will experience some discomfort after surgery, this is normal. Wounds of split donor skin graft sites are often more uncomfortable than the graft site. If you have been given painkillers to take home with you, take them as instructed, otherwise painkillers such as paracetamol should be taken as required (although you should not take more than 8 tablets in a 24 hour period). Do not take aspirin unless it is prescribed by your doctor for another condition as this may encourage bleeding. If the pain is not controlled with regular paracetamol or the painkillers provided by the hospital, please contact the rooms on 07 3353 6165 or contact your GP.

**Bathing**

It is important to follow the instructions you are given regarding the care of your wounds. Usually you will be asked to leave the dressing intact and keep it dry until you are seen in clinic. This is usually about a week after your operation. This will mean that you will not be able to take a shower during this time. However, if the wounds are to the head area, or upper arm, a bath will be possible if you can keep the wounds absolutely dry.

**Caring for yourself**

You may require a lot of help during the first week after your operation. If you live alone you should either make arrangements for someone to stay with you or stay with a friend or relative. If there is no one who can help or no one with whom you can stay, please let us know before your date of surgery.
What problems may occur?

The main problem that you may experience is the skin graft not ‘taking’. The most common reason for the graft not to ‘take’ is bleeding. This can separate the graft from the tissue beneath it. Infection and movement can also prevent the graft from sticking to the tissue beneath. A pressure dressing is therefore applied to help prevent bleeding and a bandage is used to prevent the graft from moving. The graft may also suffer with accumulation of sweat and moisture under or around the graft, resulting in separation of the graft and infection.

The dressing on your graft should be left intact until your next appointment to reduce the trauma to the healing area and risk of infection. If you experience (more than 3 days after your procedure) increasing pain, redness or swelling, a discharge on the dressing and/or a nasty smell, it may indicate that the wound is infected.

You should contact your consultant, specialist nurse or dressings nurse as soon as possible if you experience any of these symptoms in either the graft or donor site, so that your wound can be checked and antibiotics prescribed, if necessary. Blood appearing through the donor site dressings is common. This does not indicate a problem. A clean dressing should be applied over any blood-stained areas on the original donor site dressings. Do not remove the original dressing as this will remove any healing skin growth that has started under the dressing. If the dressing covering the donor site slips to expose the wound then you should apply a temporary dry, clean dressing and contact us for a review on 07 3353 6165.