RECONSTRUCTIVE SURGERY: SKIN GRAFTS AND LOCAL FLAP REPAIRS

This information aims to help you understand the operation, what is involved and some common complications that may occur. It may help answer some of your questions and help you think of other questions that you may want to ask your cancer care team; it is not intended to replace advice or discussion between you and your cancer care team.

AN OVERVIEW TO RECONSTRUCTIVE SURGERY USING SKIN GRAFTS AND LOCAL FLAP REPAIR

- Surgery for head and neck cancer can lead to some major changes in the appearance of the head and neck, and in functions such as eating, speaking and breathing.

Reconstructive surgery:
- May be needed to rebuild the area if a large amount of tissue or bone was removed during surgery.
- Will be planned by considering:
  - how best to protect vital organs, such as the food pipe and major blood vessels
  - what is safe
  - how to best to improve appearance following the surgery
  - how best to improve functions such as breathing, chewing and swallowing.

- **Skin grafts** use a thin layer of healthy skin from another part of the body to cover the wound. A thin sheet of skin is taken from somewhere not too obvious, such as your thigh or forearm and is put over the area that needs to be covered.
  - **Split thickness skin graft**: A thin layer of skin is transplanted from one area to another.
  - **Full thickness skin graft**: A thick layer of skin with more skin layers is transplanted from one area to another.
  - **Artificial skin substitutes**: A synthetic skin material may occasionally be used as a temporary wound cover.

- **Local flap repair** uses a piece of tissue with its own blood supply from an area near the wound. The piece of tissue close by is moved or rotated so that it then covers the wound. A local flap can be large or small in size.
WHY IS RECONSTRUCTIVE SURGERY NEEDED

- Reconstructive surgery is usually performed to replace tissue removed with a cancer.
- Reconstructive surgery can help repair the changes in appearance and in functions such as breathing, chewing and swallowing, caused by your surgery for head and neck cancer.
- Reconstructive surgery may be performed at the same time as the cancer removal, or at a later date. Your doctor will advise on the surgeries planned for you.

HOW TO PREPARE FOR THE OPERATION

Before the operation:

- You will need to fast (have nothing to eat or drink) for 6 hours before your operation (unless advised differently by your surgeon or anaesthetist) because reconstructive surgery is performed under a general anaesthetic (you will be asleep and will not remember what happens during the operation).
- Your surgeon will explain the details of your operation. Be sure to bring up any questions or concerns, and share your needs and wishes with your cancer care team.
- You should speak to your doctor about how to manage aspects of your lifestyle, such as smoking, drinking alcohol and chronic conditions (e.g. diabetes and obesity) that may increase the risk of complications.
  - If you take blood thinning medication for a heart condition or blood clots (such as Warfarin, Plavix, Aspirin or Pradaxa), make sure your surgeon is aware. Some of these medications need to be stopped more than a week before the operation. Sometimes a short-acting blood thinner (such as Clexane) is used before and after the surgery.
- Talk to your surgeon and cancer care team about any likely side effects to expect following the operation. You may find it useful to talk to a dietitian, speech pathologist or specialist head and neck nurse about these issues.

Visit the Beyond Five website for further information on the health professionals who may be part of your cancer care team

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WHAT TO EXPECT DURING THE OPERATION

- Reconstructive surgery may be done at the same time as the primary surgery for the removal of your cancer. Visit the Beyond Five website for further information about the specific surgery you are having for your particular cancer and for questions to ask your doctor.

Skin grafts involves:

- A layer of skin will be taken from somewhere on the body, such as your thigh or forearm, and put over the wound. The skin will be stitched or stapled in place and covered with a special dressing that will stop the skin from moving.

- For a split thickness graft, a thin sheet of skin is removed using a special instrument called a dermatome that cuts very thin slices. The place where the skin was taken from looks like a large graze and is usually left to heal on its own. It will be covered with a special dressing that is usually left in place for 1-2 weeks before it is removed.

- For a full thickness graft, a thicker piece of skin is cut with a scalpel and the place it is taken from is stitched back together.

Local flap repair involves:

- A small piece of skin from near the wound together with some of the tissue underneath and its blood supply, is moved or rotated to over the wound.

- A local flap usually matches the colour of the skin it is replacing than skin taken from another place in the body (called a free flap).
WHAT TO EXPECT AFTER THE OPERATION

- After the operation, once you are fully awake, you will be moved to a bed in the hospital or you may go to the day surgery unit if you are going home on the same day.

- You may experience swelling and pain around the site of your surgery. Your anaesthetist and surgical team will give you medicine to help control any pain and nausea after the operation.

- The site from which a skin graft was taken will have a special dressing. This is usually left in place for 1-2 weeks before being removed. After the dressing is removed the wound will look like a graze and may need ongoing dressings.

- Skin grafts do not have their own blood supply and new blood vessels need to grow into the graft from the wound to provide oxygen and nutrients. This usually takes about a week. After this time the dressing covering the graft will be removed and the graft will be carefully checked to see that it ‘takes’ to the wound and gets a good blood supply.

- A local flap repair will also be watched to ensure that the tissue that has been moved keeps a good blood supply.

- Grafts and local flaps normally only require a short stay in hospital or day surgery, but a longer stay may result depending on the nature of the cancer being removed or if the surgery is part of a more major procedure.
POSSIBLE RISKS OF RECONSTRUCTIVE SURGERY USING SKIN GRAFTS OR LOCAL FLAPS

All operations carry some risks such as blood clots, wound infections, bleeding, chest infection, adverse reactions to anaesthetic, and other complications. These risks will be explained by your cancer specialist and anaesthetist.

Your doctor will explain details of the operation, general risks and side effects of the operation, they may recommend:

- stopping blood thinners (e.g. aspirin) before surgery to reduce the risk of bleeding
- a blood thinner (called heparin) may be injected before and after surgery to reduce the risk of blood clots
- antibiotics to reduce to risk of wound infection
- early mobilisation to reduce the risk of blood clots and chest infection
- special stockings to reduce the risk of blood clots.

Reconstructive surgery is very safe but there are some specific risks you should know about:

- **Problems with the graft or flap**: If the flap or graft does not keep a good blood supply, it may not ‘take’ to the wound and may not survive. If this happens the dead tissue may need to be removed (debrided) and the wound dressed for several weeks. Occasionally further reconstructive surgery may be needed.

**The risk of a skin graft not taking is increased**

- In patients with diabetes
- In patients who smoke
- In infected wounds
- In wounds that move or with poor blood supply such as on tendons, bone or the lower leg.
SIDE EFFECTS AND THEIR MANAGEMENT

As with all operations, there is a chance that the skin graft or local flap may lead to a number of side effects. You may not experience all of the side effects. Speak with your doctor if you have any questions or concerns about treatment side effects.

Side effects common for reconstructive surgery using skin grafts and local flap repair may include:

- **Nausea**: General anaesthetic may cause nausea. This will settle down soon after the operation and can be treated with medications.

- **Sore throat**: Your throat may be sore initially because of the breathing tube placed during the operation.

- **Infection**: There is a risk of infection with any surgery. Antibiotics are not used routinely for skin surgery but may be required if there are signs of infection.

- **Pain management**: Your anaesthetist will give you pain medicine during the operation to keep you comfortable when you wake up, and you may continue on pain medicines to ensure pain is under control. Ensure you take pain relief medications as prescribed by your doctor and speak to your cancer care team if the pain is not under control, gets worse of if the medication causes any side effects. You may want to download further information about pain management, which is available on the Beyond Five website.

- **Changes in appearance**: After skin grafting, the new skin often looks different to the surrounding skin; it may be a different colour, shrink or contract, or may be slightly lower than the surface of the skin around it. Seek support from the cancer care team, and family and friends. Contacting other patients may also assist.

Visit the Beyond Five website for further information about side effects for the specific surgery you are having for your particular cancer and for questions to ask your doctor.
BEFORE GOING HOME

- Any particular instructions for wound care or medications will be provided to you before you go home. You may want to download further information about wound care on the Beyond Five website.

- You will be assessed by the team involved in your care before you go home and follow-up will be arranged with your surgeon and GP.

- Follow-up may also be arranged with any other allied health professionals that may assist you with supportive care.

- Your recovery at home may vary and you should allow time for your body to recover and heal. Regular follow-up helps to assess your progress.

Symptoms to watch for after discharge from hospital

- Significant swelling: There may be some mild swelling after the operation. This is normal and may last for some weeks. However, if this becomes very noticeable and painful, contact the surgeon, your family doctor or the hospital.

- Discharge from the wound: If the wound becomes red, hot and starts to discharge you may have an infection and should contact the surgeon or your family doctor, as you may need antibiotics. If your wound discharges a clear fluid this may just be saliva.

- Fever: If you develop a fever contact your surgeon or your family doctor.

FOLLOW-UP CARE

- After your operation, you will continue to have regular follow-up visits with your specialist doctor and cancer care team. Most patients with head and neck cancer will be monitored for five years after surgery, sometimes more.

- Any additional reconstruction, cosmetic procedures or treatments that you may need are planned after discharge. This enables time for you to recover from the initial operation, get results of the pathology that examined the tissue removed at the operation, and make the arrangements for any additional treatment or next steps.

For further information about the operation for cancer and what to expect, you can also refer to Understanding Surgery: a guide for people with cancer, their families and friends.
QUESTIONS TO ASK YOUR DOCTOR

- What will happen if I don’t have the reconstructive surgery?
- What will happen if the skin graft does not take?
- What will happen if the local flap does not survive?
- What are the possible side effects of treatment? How can they be prevented or controlled?
- How long will I have to stay in the hospital?
- How long will recovery take?
- When will I able to resume normal activities?
- Will I have a scar? Will I have this scar for the rest of my life?

You may want to write additional questions here to ask your doctor or cancer care team

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