Radial forearm free flaps and skin grafts

Introduction

Your surgeon has said that as part of your operation you will need a radial forearm free flap and skin graft. This leaflet has been designed to answer some of the questions you may have.

What is a radial free forearm flap?

A radial (section) free (released from its source) forearm (below the elbow) flap (piece of tissue with its own blood supply) is used for reconstruction of the defect (hole) caused when a cancer has been surgically removed. It is one of the most common ways of replacing tissue in the head and neck.

Benefits of this surgery

The benefit of this procedure is to remove the cancer and to cosmetically improve the appearance of the surgery site.

What can I expect from the operation?

The operation is performed under a general anaesthetic, which means that you will be asleep throughout. A piece of tissue will be removed from the inside surface of your forearm near the wrist, including the skin and fat layer (the flap), along with the vein (drains blood from the flap) and the artery (which supplies blood to the flap). Once the flap and blood vessels are freed from the arm, they are transferred to the mouth or neck and sewn into the hole made by the removal of your cancer. The flap’s blood vessels (the vein and artery) are joined to blood vessels in your neck under a microscope (micro-vascular surgery). These blood vessels keep the flap alive while it heals into its new place.

Once the flap is removed from your forearm, the hole created there is covered with a thin skin graft, usually from your tummy.
How will I be cared for after my operation?

It is common for you to be looked after in the intensive care unit for the first night following your surgery. The doctors and nurses there will be able to keep a very close eye on the flap to make sure it is getting a good supply of blood and oxygen. If cancer has spread into the lymph nodes in the neck, some or all of the lymph nodes may be removed. This is called a neck dissection (for further information, see leaflet GHPI0429 About neck dissection. Please ask member of staff if you would like a copy). Occasionally, it may be necessary to put a tube in your throat to help your breathing. This is called a tracheostomy and is usually only required during the time when swelling may be a problem after surgery. The tube is looked after by the ward nurses and is usually removed after five to seven days (see leaflet GHPI0547 Having a temporary tracheostomy. Please ask a member of staff if you would like a copy).

To allow the flap to heal, you will not be allowed to eat or drink for the first ten days. You will be fed either via a naso-gastric tube, a thin plastic tube, inserted through your nostril into your stomach, or by a special feeding tube which is inserted directly into your stomach. This tube will usually be put in to your stomach several days before your operation. You will be given special feeds and this will be carefully monitored by the dietitian.

As part of the recovery process you will be seen on the ward by a physiotherapist and given neck and shoulder range of movement exercises to prevent stiffness and loss of strength.

What will my arm be like afterwards?

At the end of the operation, your arm will be bandaged and held with a splint to stop movement of the graft at the donor site. The bandage is removed after about ten days and replaced with a lighter dressing.

Will I have any discomfort?

There may be some soreness around the graft site which can be controlled with pain relief. Initially, your arm movement will be restricted as it needs to be kept still. After 48 hours, movement will gradually be reintroduced.
Some of your sutures (stitches) will be removed seven to ten days after your operation and the remaining sutures a few days later. You will be able to use your arm normally after two weeks. However, returning to full use could take longer if you generally use heavy machinery or equipment.

There will usually be one or two drains coming out through the skin on your neck, plus another drain from your arm and stitches or clips to the surgical cut. During the operation, small nerves may be cut which can make the neck skin numb. This means that many patients do not have much neck pain after the operation. If you do suffer any pain or discomfort, please tell the ward nurses.

**What problems can occur?**

**Flap failure:** Sometimes the vein or artery can become blocked by a clot. Any clots inside the vein or artery attached to the flap can cause the flap to be damaged. If this occurs, you may be required to return to the operating theatre to remove the clot or possibly replace the flap with another one from another area on your body.

**Infection:** The dressings on your arm will help to protect the donor site. All of your wounds will be cleaned and dressed as necessary. Sometimes infection can occur but this will usually be easily treated with antibiotics. You will be given advice about how to keep your mouth and teeth clean to avoid any infection developing inside the mouth. Any signs such as a raised temperature, redness, new pain or discharge should be reported to the dressings clinic staff or to Ward 2B if out of hours.

**Nerve damage:** It is likely that the area around the scar will feel numb. The area on the forearm where we take the flap from is where nerves run towards your thumb. Occasionally this may lead to some numbness of the base of the thumb.

**How quickly will I recover?**

Recovery depends on the type of treatment you have undergone as well as your own individual healing. Resuming daily activities as soon as you are able can help the healing process. Your doctor will give advice about returning to work.
You should avoid vigorous exercise for six weeks after the operation.

Your feelings

The scar and skin graft will look quite different from the rest of your arm, this can sometimes affect your feelings about how you look and can be difficult to cope with. It will take 6 to 12 months for the scar line to fade. Your specialist nurse or consultant can offer support and further information for you if you are concerned about this.

There are other patients who have gone through the same situation. Many patients find it helpful to talk to another person who has experience in a similar event. If you would like to do this please ask your specialist nurse who can put you in touch with someone who knows what it is like.

Contact information

If you have any questions or concerns, please contact:

Head and neck cancer,
Macmillan clinical nurse specialist
Tel: 0300 422 6785
Monday to Thursday, 8:00am to 4:00pm

Dressing clinic staff
Tel: 0300 422 3194 and ask for the dressing clinic
Monday to Thursday, 9:00am to 4:00pm
Friday, 9:00am to 1:00pm

Out of Hours
Ward 2b, Gloucestershire Royal Hospital:
Tel: 0300 422 6184

Please note that the Ward 2b contact number is only to be used out of hours.
Further information

Macmillan Cancer Support
Website www.macmillan.org.uk
Helpline: 0808 808 0000

Further support
If you need further support before or after the surgery please contact your GP, consultant, clinical nurse specialist or the Macmillan helpline. The GP out of hours service and the Macmillan helpline are available outside of normal working hours.