

The ROYAL MARSDEN

NHS Foundation Trust

Having a radial forearm free flap

Head and Neck

Patient Information



NHS

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Introduction

This leaflet has been written to explain your operation and answer commonly asked questions. If you have any concerns about your illness or your treatment, please talk to your surgeon or clinical nurse specialist (key worker).

What is a radial forearm free flap?

A radial forearm free flap (RFFF) is an area of skin and tissue that is taken from the forearm and used to reconstruct an area in your mouth following head and neck cancer surgery. It can be used to replace large parts of the mouth and has the advantage that when it heals, it does not shrink. The flap is a living graft which means that the blood vessels in the flap are then connected up to blood vessels in the neck.

Why will a neck dissection be carried out?

A neck dissection is carried out at the same time as the radial forearm free flap is raised. It is necessary to perform this operation so that the blood vessels supplying and draining the flap are joined to blood vessels in your neck. This will be performed by your surgeon under a microscope. It will therefore take place under the same general anaesthetic.

What happens before I come to hospital?

The doctors will discuss the surgery with you at your outpatient appointment. Please ask if you do not understand any terms they use. You will be given the opportunity to see the clinical nurse specialist who will be your key worker and available for advice and further information.

You will also have a pre-operative assessment visit. This is usually one to two weeks before your planned admission for your operation. During this assessment, a specialist assessment nurse will see you. They will discuss your general health with you, including any medicines you are currently taking. They will decide whether you need any tests before you

have a general anaesthetic. You may also be seen by either the doctor or anaesthetist, or both if the nurse feels it is necessary. They will examine you and may listen to your heart and lungs. You will be seen by a Speech and Language Therapist who will assess your swallow and speech. They will provide you with information on how your speech and swallowing will be affected by the surgery.

Tests you may have include:

- Routine blood tests
- ECG (electrocardiogram or heart trace)
- Chest x-ray.

This appointment is also an opportunity to ask questions about your stay in hospital and to share any concerns you may have.

What does the surgery involve?

Your surgeon will take a piece of tissue including skin and blood vessels from the inside surface of your forearm near the wrist.

- The skin and fat layer in this region is removed (the flap) along with two blood vessels. One vessel supplies blood to the flap (the artery) which gives rise to the pulse at the wrist at the base of the thumb. The other drains blood from the flap (the vein).
- Once the flap of skin is raised, it is transferred to the head and neck and sewn into the hole created by the removal of your cancer. The blood vessels supplying and draining the flap are then joined to blood vessels in your neck under a microscope. These blood vessels then keep the flap alive while it heals into its new place.
- Once the flap is removed from your forearm, the hole created is covered with a skin graft. This graft of skin can be taken from one of several places. Commonly a thin piece of skin is shaved from the arm above the elbow. Alternatively some skin will be taken from your tummy or thigh.

What will my arm be like afterwards?

Your forearm will be placed in a bandage and sometimes your arm will be held with the hand up in a special sling for a few days. The bandage is removed after around 10 days and replaced with a lighter dressing.

The blood vessels lifted with the flap run from the inside of the wrist, as far as the inside of the elbow; there will be a row of stitches along this line which will be taken out when the bandage is removed. The nerve which supplies feeling to the skin over the base and side of the thumb is sometimes bruised when the flap is raised. This can mean that the area ends up tingly or numb for several months following surgery. Occasionally it can be permanent. Rarely, a bruised nerve can give rise to feelings of pain.

You may also notice that your hand does not feel as strong as it was after the operation and sometimes it will feel colder than it used to in the winter months. On average, the hospital stay is seven to 10 days.

What are the possible complications?

In 2-3% of cases (2 to 3 in 100), one of the blood vessels supplying or draining the flap can develop a blood clot. This means that the flap does not get any fresh blood, or if the drainage vein clots, the flap becomes very congested with old blood. If this occurs, it usually happens within the first two days and means that you will have to return to the operating theatre to have the clot removed. Removing the clot is not always successful and on these occasions the flap 'fails' and an alternative method of reconstruction is considered.

Sometimes the drain tubes which are put in at surgery become blocked. This means that blood has collected under the

skin and formed a clot (haematoma). If this occurs, it may be necessary to return to the operating theatre to remove the clot and replace the drains. Swelling can slow down healing and it may affect the final result.

Occasionally you may find that the skin around your jaw/neck may be numb after the surgery and will persist for several months. This may improve gradually, but you should not expect it to return entirely to normal.

How can the physiotherapist help me?

The physiotherapist will help you to start moving and will assist you with getting out of bed from the first day following your surgery.

Following your radial forearm free flap, you will have bandaging around the forearm. At this point, the physiotherapist will guide you with some gentle exercises to follow to maintain the movement in your fingers and elbow.

The bandage is usually removed on day 10 after your operation and changed for a lighter one. Further exercises at this point will help to reduce any swelling in the hand, and help prevent stiffness at the elbow and wrist joints. The physiotherapist will discuss this with you following your surgery.

How will I know if I have done too much?

If you over-exercise you may feel sore and stiff the following day. The best policy is to avoid this if possible, making sure you exercise gently and slowly.

What can I not do?

Following a radial forearm free flap, we ask you to avoid lifting heavy weights which may include carrying heavy shopping bags, the vacuum cleaner or small children, for a few weeks after your operation. This is simply to prevent you pulling on your graft site as it starts to heal.

How can the speech and language therapist help me?

Speech and language therapists work with people who have difficulties with their speech and/or swallowing. You will see the speech and language therapist (SLT) before your surgery to discuss what impact surgery is likely to have on both your speech and swallowing. After surgery, the speech and language therapist will assess your speech and swallowing and provide exercises and advice to help.

How can the dietitian help me?

The dietitian can assess:

- Your nutritional status by looking at your usual eating habits and weight history
- Your nutritional requirements using different food textures, additional calories and protein as necessary
- Working closely with other members of the team, the dietitian will advise on the most suitable way for your nutritional requirements to be given to you. If you are unable to take anything by mouth for a long time, it may be necessary for you to have a feeding tube.

If you need a feeding tube, there is a separate information leaflet about this. The dietitian will be able to advise you on what will be given through the tube. The tube will remain in place until you are managing enough food by mouth. The dietitian will check your progress regularly and discuss it with you.

Contact details

If you have any further questions about your surgery, please contact your clinical nurse specialist or surgical team.

Key worker, Head and Neck Surgery: 020 7352 8171 ext 1546

Advanced nurse Practitioner, Head and Neck Surgery:
020 7352 8171 ext 4700

Physiotherapy team: 020 7808 2821
(answer machine)

Speech and Language Therapy team: 020 7808 2815

Outside normal workings, you may contact:

The Royal Marsden Macmillan Hotline: 020 8915 6899

You can ring the hotline 24 hours a day, 7 days a week.

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

You can also find more information about the types of cancer of the head and neck, surgery or other treatments from Macmillan Cancer Support either by phoning 0808 808 0000 or by visiting their website at *www.macmillan.org.uk*

References

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

Freephone: 0800 783 7176

Email: patientcentre@rmh.nhs.uk

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

This leaflet has been adapted by Lorraine Guinan, Clinical Nurse Specialist and Jorn Rixen-Osterbro, Advanced Nurse Practitioner, from the patient information leaflet produced by British Association of Oral and Maxillofacial Surgeons.



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