

What is a radial forearm free flap?

A radial forearm free flap is one way of filling a hole that is left when a cancer has been removed (reconstruction).

It is one of the most common ways of replacing tissue in the head and neck, particularly after mouth cancers have been removed.

This procedure can be used to replace large parts of the mouth and has the advantage that when it heals it does not shrink, so that speech and swallowing should not be greatly affected.

What does the surgery involve?

The surgeon will take a piece of skin 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 of which supplies blood to the flap (the artery) and one of which drains blood from it (the vein).

Once the flap of skin is removed it is transferred to the area created by the removal of your cancer. The blood vessels supplying and draining the flap are then joined to blood vessels in your neck.

This is very delicate work and is done with the aid of a microscope. 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 is covered with a skin graft. A skin graft can be taken from one of several places, known as the donor site. Commonly, a thin piece of skin is shaved from the arm above the elbow. Alternatively some skin may be taken from your tummy.

What will the arm be like afterwards?

A dressing will be placed on the forearm and secured with stitches. This helps the skin graft to heal and will be in place for 5 days. Your arm will then be dressed as necessary over the next five to ten days until the wound has healed. The blood vessels lifted with the flap run from the inside of the wrist as far as the inside of the elbow, so 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 is tingly or numb for several months following surgery. Occasionally, this can be permanent.

Rarely, a bruised nerve can give rise to feelings of pain. After the operation you may also notice that your hand does not feel as strong as it was before and it may also be more sensitive to cold.

What are the possible problems?

In two to three per cent of cases, one of the blood vessels supplying or draining the flap may develop a blood clot.

This means either that the flap does not get any fresh blood or, if the drainage vein clots, the flap becomes blocked 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 has failed and an alternative method of reconstruction is sought.

Questions or concerns

Should you have any further questions, please do not hesitate to talk to your doctor or contact:

Macmillan Information and Support Centre - Queen Victoria Hospital

Tel: 01342 414369

Email: cancer.information@qvh.nhs.uk

For out of hours emergencies, please contact our switchboard on 01342 414000 and ask for the Maxillofacial doctor on duty.

Radial Forearm Free Flap

Patient information

Links to further information and support

- Macmillan Cancer Support**
Provide practical, medical and financial support and push for better cancer care (offers an interpreting service).
Tel: 0808 808 000 www.macmillan.org.uk
- NHS Choices for Cancer Information Prescriptions**
www.nhs.uk/ipg
- Cancer Research UK**
This charity provides information about cancer, treatment and clinical trials.
Tel: 0808 800 4040 www.cancerresearchuk.org
- NHS Direct**
Tel: 111 www.nhsdirect.nhs.uk
- Headstart**
Head and neck cancer support group which meets six times per year, offering an opportunity for people to meet other head and neck cancer patients.
Tel: 01342 414493 or 01634 825389
(Pauline Mortimer)
- NHS stop smoking service**
Tel: 0800 022 4332 www.nhs.uk/smokefree

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