

Department of Plastic Surgery

Forehead Flap Reconstruction

This leaflet explains more about a forehead flap reconstruction procedure and what to expect. We may use this type of flap following skin surgery to your nose, to repair the defect.

Terminology

Reconstruction - this is a surgical repair of a wound.

Skin Graft - this is taking a piece of skin from a healthy site on your body and transplanting it onto a wound.

Local Skin Flap - this is freeing a piece of skin near to the surgery site and stretching it across to repair the wound.

What is a forehead flap reconstruction?

This is a surgical technique used to repair a wound on the nose after the removal of a skin cancer.

It is done in two or three stages over a period of weeks to months.

- Stage 1

This involves freeing a flap of skin from the forehead, with its own blood supply, and attaching it over the wound on the nose.

The flap remains attached until the nose is fully healed. This is usually around 4 weeks.

- Stage 2

Once the nose has healed, the flap will be separated from the forehead.

- Stage 3

After the separation, the flap may be bulky and a thinning procedure to the skin on the nose may be required to achieve a better cosmetic appearance. This is usually done at least 8 weeks later (although could be longer).

The final result is a scar which runs up your forehead, where the skin was freed from, and new skin on your nose which covers the area the skin cancer was removed from. It re-forms the shape and function of the nose.

Why have a forehead flap?

This procedure is used to repair wounds on the nose that are difficult to manage using other surgical techniques, such as a skin graft or local skin flap. By leaving the flap attached until the nose is fully healed it has the best chance of adhering to the wound, as it maintains its own blood supply.

Most importantly, the procedure helps keep the full function of the nose, and gives a good cosmetic outcome.

Risks of Surgery

As with any procedure there are associated risks. In most cases you will have a general anaesthetic combined with local anaesthetic.

Forehead flap surgery is commonly performed and is generally a safe surgical procedure. Before suggesting the operation your surgeon will have weighed up the potential benefits against side effects, however it is important you are aware of them in order to make an informed decision.

- **Bleeding** - There is a risk of bleeding both during and after the procedure. It is usually not enough to be harmful. Bleeding is controlled during surgery with something called electrocautery (this burns the blood vessels to stop bleeding). After surgery, dressings are used. If you are on blood thinning drugs e.g. Warfarin, you will receive pre-operative instructions to minimise your bleeding risk.
- **Pain** - You may experience some pain or discomfort after the surgery. You will be advised by your surgeon or specialist nurse on which pain relief is recommended and how often you should take it.
- **Infection** - Infections are a rare complication of this type of surgery. However, you will be given antibiotics after your operation to further reduce this risk. These may be tablets or an ointment.
- **Scar** - With all surgery there will be a scar. With a forehead flap there will be a scar on the nose where the skin cancer is removed from, and a scar on the forehead where the flap is freed. The scars will be red/pink initially but will fade to a white/silver colour. Occasionally there will be an area on your forehead that is left to heal with dressings. This may result in a flat disc-like scar. One of the specialists will advise you after your operation on techniques which may improve the appearance of the scarring.
- **Lumpy Scar** - Occasionally scars can become lumpy and sometimes darker. This can be managed with steroid injections to reduce the lumps and improve the appearance.
- **Flap Failure** - There is a small risk the flap may fail following the surgery. This is where the flap does not attach to the wound. If the flap fails we would have to separate the skin and find an alternative method of repairing the wound. The function and cosmetic outcome may be compromised. There are a number of reasons that this may happen, but smoking is the biggest reason (see below for smoking cessation advice).
- **Numbness** - The face has a number of nerves which provide the normal feeling and sensations. Sometimes these nerves are damaged during the surgery. You may lose some sensation locally on your forehead and nose. The sensation may return with time but numbness may be permanent.
- **Hair Growth** - Occasionally hair can grow on the transplanted skin because the flap has been taken from near the hairline. This may result in fine hair growing on the nose. There are a number of methods to treat this, which you can discuss with your surgeon if necessary.

- **Thrombosis** - This means a clot of blood that may develop in the leg veins or the lungs. This can occur after any surgery, although certain procedures and patient groups carry more risk than others. Your risk will be assessed before your surgery and steps taken to minimise this.

Are there any alternatives?

Once the size and extent of your wound is clear your surgeon will discuss surgical repair options, and if there are any alternative options for repair, such as a skin graft or local flap.

If the wound is small there may be an option to allow the wound to heal naturally with dressings.

For larger wounds, however, a forehead flap is often the only repair that will provide the tissue required to reconstruct the nose.

Preparation for a forehead flap

If you want to discuss any of the details within this leaflet further, you will be offered a pre-operative appointment with your clinical nurse specialist. You will also have a pre-operative assessment before your surgery where you will meet with the anaesthetic and theatre teams.

Work

Depending on your type of work you may want to take 3 weeks off initially. Your surgeon can provide you with a fitness to work certificate. You will have the opportunity to discuss your individual needs with your clinical nurse specialist.

Dressing changes

You will have a number of appointments for suture (stitches) removal and dressing care between your surgery dates.

Date for repair

You will receive your second stage surgery date after your initial operation.

Glasses

Wearing glasses between the first and second stage surgery may become difficult as the skin from the forehead sits between the eyebrows during this period. You may want to wear contact lenses, or have a family member assist you at home.

Blood thinners

You will be given instructions on whether to stop your blood thinners e.g. Warfarin prior to surgery or whether you need to have an INR check (blood test) before surgery. You will be informed at your pre-operative assessment of exact instructions.

Diabetes

If you are diabetic you may need to adjust your insulin/tablets during the period you are fasting prior to your surgery. You will be informed at your pre-operative assessment of exact instructions.

Smoking

We would advise you stop or cut down prior to your surgery. Please advise us if you would like to be referred to one of our smoking cessation services (see below).

What happens on the day of surgery?

Before your surgery, a member of the surgical team will explain the procedure and answer any questions you may have. If you are still happy to proceed they will complete the consent form for the surgery with you.

You will meet with the anaesthetist who will ensure you are fit and well for surgery. You will then have a drip put in your arm and when you are ready for the surgery the anaesthetist will give you some medication through the drip to help you fall asleep.

Stage 1 - creating the flap

This stage will take between one and four hours depending on the size and location of the wound.

A template in the shape of the wound is placed just under the hairline on the forehead and the bridge of the skin is drawn downwards to the inner eyebrow. The flap of skin is cut and then turned upside down and secured onto the wound on the nose. This is done using fine stitches or surgical glue.

Once in place the area on the forehead where the skin was taken from will be sewn up too. Occasionally depending on the size of the wound there may be an area which will be left open to heal.

Sometimes the nose may require some support through the use of cartilage which is generally taken from your ear, or inside of nose. This is to support the shape of your nostril.

You may stay in hospital for up to two days after this stage.



Creating the flap

After surgery

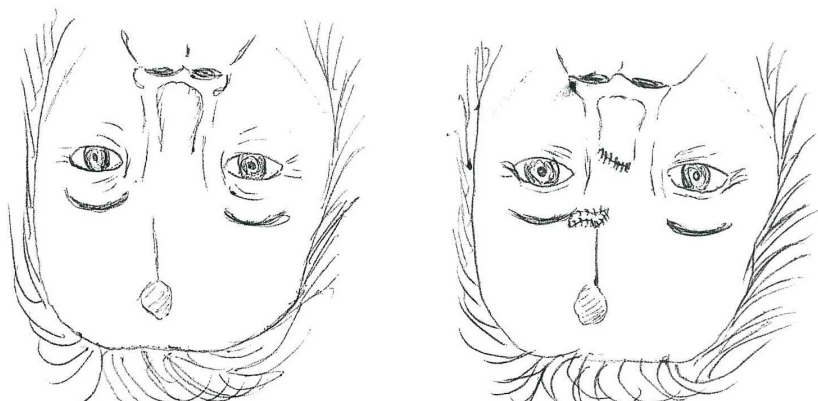
Stage 2 - Separating the flap

This is performed once the flap has had a chance to heal onto the nose. This stage can be done under local (awake) or general (asleep) anaesthetic. You will be advised by your surgeon which option is best for you.

The skin between the nose and forehead will be separated and the skin on the nose stitched into place with fine stitches.

The forehead skin will be stitched into place to complete the surgery.

Dressings will be applied before you are able to go home, usually on the same day.



Separating of the flap

End result

Stage 3 - Touching up/thinning the flap

Sometimes the skin on the forehead is thicker than the skin on the nose. This can create a bulky appearance to the nose. To reduce this, the surgeon can thin the flap, which improves the cosmetic appearance of the flap. This can be done under a local (awake) or general (asleep) anaesthetic, your surgeon will advise which option is best for you.

A cut is made along the same scar line on the nose and the skin is lifted.

The bulky tissue underneath is removed.

The skin is stitched back in place.

Dressings will be applied and you will be able to go home on the same day.

Possible side effects after surgery

- Pain/Headaches - You may experience some pain or discomfort after your operation around the site of your wound and generalised headaches. You will be advised on suitable pain relief prior to discharge.
- Swelling - You may get some swelling around the eyes. This is to be expected and should settle within a week.
- Bleeding and oozing - The flap has its own blood supply, and remains open between stage one and two. Therefore it is likely you will experience some bleeding and oozing around the eyes and nose creating some discomfort. You will have a dressing in place which will be changed regularly to control this.
- Infection - Infections are a rare complication of this type of surgery; however, you will be given antibiotics after your operation to further reduce this risk. These may be tablets or an ointment.

Instructions after surgery

After each stage of the surgery you will have an appointment booked to remove any stitches.

You may also have appointments for dressing changes between these times. The number of dressing changes varies between individual patients. You will be advised when to attend.

After each stage of the procedure it is important to rest and avoid any strenuous activities.

You may want to take time off work until all of the surgery is complete. You may also want to postpone any social engagements. This is particularly relevant after the first stage of the reconstruction.

It may be advisable to sleep on two pillows at night to reduce the risk of bleeding and to use old bed linen or a towel until any bleeding/oozing stops.

If you require any dressings, antibiotics or antibiotic ointment this will be provided for you to take home.

The second and third stages of the procedure are usually more straightforward. There are unlikely to be any open or raw areas, so you will not require as much time to recover.

It is still advisable to avoid strenuous activity for a week after the second and third stages of surgery.

What support is available?

You may experience some anxiety during this procedure, especially after stage one. It is important to remember the appearance after the first stage is not the final result. You will see change and improvement at each stage.

It may take some time for your skin to adjust and feel normal again. It is natural to feel anxious as you are going through a physical change.

If you would like to speak to someone about how you are feeling either before or after the surgery or have any questions, please contact your Clinical Nurse Specialist.

Further Information

Smoking cessation advice and self-referral – <http://www.smokefreenorfolk.nhs.uk>

Skin Cancer Clinical Nurse Specialists – 01603 288365 (Mon-Fri)

Messages will usually be checked within 2 working days (not weekends or bank holidays).

In case of emergency after surgery, please contact Earsham Ward – 01603 289950 (24 hours)

