

Nasal Reconstruction with a Forehead Flap

Nasal reconstruction using a paramedian forehead flap is a surgical technique to reconstruct different kinds of defects of the nose. In this operation a reconstructive surgeon uses skin from the forehead above the eyebrow and pivots it vertically to replace missing nasal tissue. Over a period of many years, the technique has been modified and adjusted by many different surgeons and it has evolved to be a popular way of repairing nasal defects.

Why might it be needed?

Forehead flaps are often used to reconstruct nasal defects over 1.5cm in size. It is an excellent flap as it has a reliable blood supply, and the colour and texture of the skin is a close match to that of the nose.

Stages of the operation

First Stage; this is often the longest stage of the operation. A template is made and designed from intact side of the nose (if possible) to make as symmetric a reconstruction as possible. The skin of the forehead is incised according to the template and turned down onto the nose, where it is sutured into the defect. Where the skin has been removed on the forehead, the wound is closed in a straight vertical line, with a combination of sutures and staples. If there is a small area at the top that cant be brought together, it will heal on its own slowly, filling in from the sides over 4-6 weeks as long as it is kept moist with Vaseline and free of infection.

Extra strength is typically required to support a good shape to the nose; this requires cartilage taken from the ear or the inside of the nose (septum). When taken from the ear, it is via a cut on the inside of the ear that heals very well and often cannot be seen. The ear itself does not change shape despite removing some of this cartilage.

2nd Stage; typically performed 3 weeks later; it may be done either under local anaesthesia or general. This is the stage of pedicle division – where the bridge of skin is removed and the inner part of the eyebrow (where the flap is turned down) is realigned with sutures. Most of the time you will be able to go home on the same day.

For some patients, the pedicle will not yet be ready to be divided, and an ‘intermediate’ stage is done. This may occur because of concerns over healing, or where more cartilage is required to be placed. In these cases your pedicle division will typically occur 3 weeks later.

3rd Stage; performed 4-6 months later, once the flap is settled in. Often it is still ‘bulky’ or ‘puffy’ at this stage, and needs some minor adjustments to remodel it, and allow it to better blend into the native nasal skin.

Other ‘touch-ups’

The flap takes over a year to complete its remodelling and scarring. Along the way it may be prudent to use steroid injections, dermabrasion, hair removal (plucking or shaving only for the first year) and other small clinic/office based procedures to achieve the desired outcome.

1. How you should expect to feel

This can be a confronting time for patients, who will take some time to adjust to the strip of skin that comes down from the forehead and is sewn into the nose. Please remember its necessary for your flap to stay attached in order for it to get the blood supply it needs, but this is only temporary.

You may feel a headache, or sense of pressure, like wearing a hat that's too small for your head. That is normal and occurs because your skin has been closed tightly over the forehead- this will ease as the days go by and the skin relaxes as it heals. The pain relief prescribed to you may be helpful in improving this discomfort, similarly sleeping with your head raised on a pillow may be more comfortable than lying flat.

After General Anaesthesia;

You may feel groggy for up to 48 hours, and sleep more than usual. It can also make you feel nauseated. Please keep yourself hydrated with water or electrolyte drinks such as Gatorade. You may feel like a bland diet. If significant nausea and vomiting occurs please call us so that we can prescribe or adjust your medications to help with this.

2. Swelling

There is typically swelling of the forehead and flap, peaking around days 2-3 post op. Sleeping with your head elevated is helpful. Please do not directly apply ice to the flap as it may compromise its blood supply.

3. Pain Relief

Please take your pain relief as prescribed by your doctor. If you have any allergies please make sure your doctor is aware; and if you develop any itching or nausea (or other unwanted side effects) please call and advise us. Some of the more common side effects of stronger pain relief may include;

- constipation; keep well hydrated and consider the use of gentle laxatives such as Metamucil
- nausea; use simple pain relief such as paracetamol or ibuprofen regularly, and use opiates (such as endone) only for breakthrough pain relief
- DO NOT DRIVE or CONSUME ALCOHOL whilst taking pain medication

4. Physical activity

Please avoid lifting, straining, strenuous activity or exercise for the first 10 days after the operation. Light mobility is however encouraged – short, frequent walks around your house can decrease the chances of complications such as developing a blood clot in your legs. It is not recommended that you lie in bed for long periods of time.

5. Wound care

There will be a row of stitches and/or staple on the forehead – these need to be covered in a layer of Vaseline at all times. Gentle cleaning with soap and water can start on day 3 post op.

There will be a dressing around the bridge of skin – please don't get this wet as it will stay soggy and may become malodorous. Dr Meller/her registrar will change this for you and teach you how to maintain it at your week 1 post operative visit.

Where the flap is sewn onto the nose there should be little to no crusting or scabbing. This requires you to carefully clean the suture lines gently with a moist cotton bud, and immediately applying generous amounts of Vaseline to the area to keep crusts from forming.

If ear cartilage was needed in surgery, you will have a cotton bolster sewn to your ear for one week. This is not to get wet. Ears tend to have more pain, which tends to last a few weeks longer than the nasal flap pain. This will improve significantly once the bolster is removed, typically at the first post operative appointment.

Who can I call if I have concerns?

Depending on where you initially saw Dr Meller, you may call;

1. The rooms at SCENT, Frenchs Forest
49 Frenchs Forest Rd East
(02) 9451 9883
2. The rooms at 52 Denistone Rd, Denistone
(02) 9874 0347

OR; Prince of Wales Hospital on (02) 9382 2222 ; please ask for the ENT registrar on call.

If you are concerned that you are experiencing an emergent problem, such as serious bleeding or difficulty breathing or swallowing, please call 000 or attend your nearest emergency department immediately.