

Facial Nerve graft surgery

Cranial Nerve V (Masseteric), to Cranial Nerve VII

(Chewing nerve-powered smile muscle strengthening)

Pre-operatively

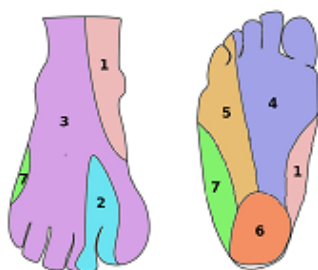
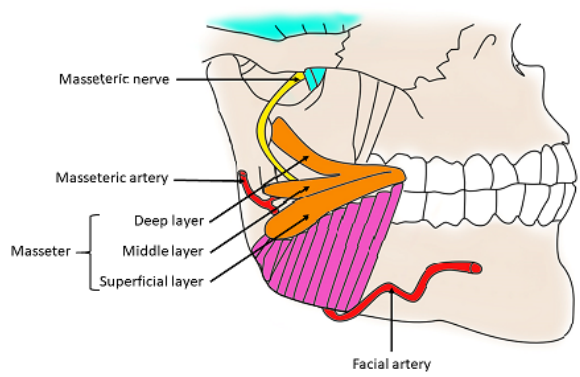
Your suitability for this surgery will be discussed between you and our multidisciplinary team, which consists of specialist facial physiotherapists, psychologists and plastic surgeons. We will work with you to ensure that you are physically and psychologically ready for the surgery, and the post-operative rehabilitation. Before a surgical date is arranged you will also be seen by the pre-operative nurses and anaesthetists to ensure that you are fit for surgery. Please feel free to ask questions at any stage of this process.

We will carry out a series of assessments before your operation. You will attend pre-assessment clinic and have photographs and/or videos taken in the medical photography department.

Background

This procedure uses part of the nerve supply from your fifth cranial nerve (masseteric nerve) to improve the function of your smile muscles. This information leaflet will explain what to expect from this surgery and your recovery, as well as the exercises you will need to do, with the assistance of your facial therapist, to make the most of your surgery.

The masseteric nerve supplies the power of the biting muscle at the side of your jaw. There are three branches of this nerve. One branch is used to increase the power supply to the smile muscles. Research has shown that this does not adversely affect the strength of the biting muscle. A nerve taken from the leg connects the powerful biting nerve to the smiling muscles.



The sural nerve from your leg is used in the operation. It is located on the outside of your ankle. This supplies sensation to the small toe and side of your foot (area 7 on the diagram). Therefore, after surgery you will lose some sensation in this area. This should not cause you any problems with movement or walking. You may also find that the area of the nerve grafts is painful for a few days. Please keep your ankle moving by doing gentle movements and take pain relief as required, to ensure that you are able to walk around freely.

Before surgery your consultant may suggest that you have chemodenervation (Botulinum toxin) therapy to the over-active muscles on the good side of the face. This will reduce the movement temporarily to the areas injected and help with resting facial symmetry before your operation.

A member of the facial therapy team will assess you and teach you facial massage and specific facial muscles stretches and exercises in order to prepare your muscles for the new activity after surgery.

The power for your smile will come from your nerve that usually works biting, so you will need to practice using your bite to begin to trigger a smile response. Your facial therapist will teach you 'bite and smile' during your therapy sessions. As you recover from your surgery this will create the increased power to the smile muscles. As your rehabilitation continues, and you get used to achieving a smile with a bite, your brain will learn to smile again without needing to bite.

During the operation

Your surgeon locates the masseteric nerve through an incision made close to your ear.

The sural nerve graft from your leg is divided:

- One section is attached to the masseteric nerve and then attached directly to a muscle which lifts your top lip as part of a smile, called levator labii
- The second section attached to the masseteric nerve and then directly to your smile muscle, called zygomaticus major.

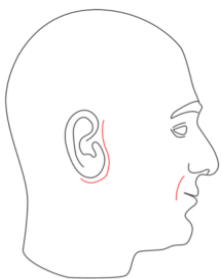
The attachment of these nerves may require an additional small incision along the skin crease nasolabial fold) between your nose and the corner of your mouth.

The nerves are attached to the muscle using a very fine stitch.

Where possible, the masseteric is used to attach to zygomaticus major – your muscle for smile. In these instances, there will not be a need to use the additional sural nerve grafts.

This surgery takes approximately three hours and you will need to stay in hospital for 1 or 2 nights.

Will I have any scars, swelling or pain after surgery?



Incisions will follow your facial contours to give a natural effect after surgery

Your scars will be hidden in your natural face contours and will heal to fine white lines that will not be obviously visible.

With any surgery, there is some pain and discomfort. We will assess you before discharge to make sure you have adequate pain relief medication so that you can return to a good level of function quickly.



During your surgery, you will have had a facemask supplied by your surgeon. This will be checked on the ward by the pressure garment team, who will show you how to put the mask on and take it off and supply you with an additional mask, so that you can always wear a clean one. You will need to wear this mask for the first 2 weeks after your surgery.

Your facial swelling will peak at around 3 to 4 days after surgery and will be well controlled if you sleep with your head raised on pillows, wear the face mask and apply arnica ointment postoperatively. For the first two weeks after surgery you will need to wear this supportive pressure garment face mask to reduce swelling.

You should wear it day and night, except for bathing and eating (as required).

What will happen after the operation?

When you wake up from the operation, you will be wearing your pressure garment support mask and have a wound drain in place. You will also have stitches and will be bandaged.

You will be able to get up and walk from the day of surgery as long as you feel well enough. It may be painful to walk initially, but this will soon ease.

You will stay in hospital for approximately 1 day and once you are medically stable and able to get yourself washed and dressed safely you will be discharged home.

You will be able to eat, drink and chew food normally after your operation.

Post-Operatively

You will need to wait for the nerve fibres to grow along the nerve graft before you see results from your surgery. It takes between 3 and 9 months for the nerve to be able to move the smile muscle.

At 1-2 weeks, after surgery you will have an appointment with your consultant for a wound review and for your stitches or steri-strips to be removed. You will also have regular outpatient dressing clinic appointments to ensure that your wound is healing well.

You **must not massage or stretch your facial muscles for the first six weeks** after surgery. This is to allow the nerve graft to heal securely in place.

Six weeks after your surgery you will be seen by a member of the facial therapy team who will show you how to stretch your facial muscles effectively and start to learn 'bite and smile'. Your therapist will then progress your exercises as appropriate for you.

You may have had chemodenervation (Botulinum toxin) therapy at the time of surgery. This will continue at 4-6 monthly intervals together with specific exercises to promote symmetrical facial movement patterns until you have learnt an effective 'bite and smile'.

Your therapy will continue until you have gained sufficient movement, knowledge and confidence to use your smile and to be able to continue the strengthening process independently.

**If you have any further questions please ask a member of the facial palsy team.
01342 414004 0830-1500 Monday – Thursday**