

Post-operative Selective Myoneurectomy

Patient Information Leaflet

Your surgery was to release the 'tug of war' between the lower facial muscles and the upper 'smile' muscles. The key goal of surgery was to improve your comfort but with dedicated practice, we hope to improve your facial movement as well.

You can start to massage your face as soon as you feel able. Use the tips of the fingers to massage in small circles over the forehead, cheek and chin gently without causing any pain.

Early after surgery, you may feel a little sore around your ear and neck. When your wound has healed, gently massage your scar so that this does not become tight. You can also apply petroleum jelly (such as Vaseline) over your scar, which may improve the overall appearance of the scar in the long term.

You may have some numbness in your cheek, this is normal. During surgery the nerve endings that register sensation can be damaged and take several weeks to heal. It is important to start gently touching this area whilst the sensation is returning so your face does not become hypersensitive.

Two weeks onwards

You should now massage your face daily. You should not cause yourself any pain. Reduce the pressure to a light touch if needed to make sure that you are comfortable.

At this stage, you should also re-start the stretching programme for your facial muscles that you were doing prior to your surgery. Initially after surgery, your cheek may feel tighter and look lifted. This is because the cheek muscles were used to working harder against the resistance of the downward pulling neck muscles. Without that downward pull, the cheek muscles do not have to work so hard and need stretching, need to learn to relax and start working more gently.

Your daily stretch and relaxation programme will enable the tight muscles to gradually lengthen and release, which will allow them to work more naturally and effortlessly. Your facial therapist will guide you through this programme and give you a muscle release handout designed specifically for you but until you see them please follow the releases on the final page or your pre-existing stretching programme.

Your facial therapist will also work with you on neuromuscular retraining for your smile. This will involve relearning the movement pattern, gentle coordination and muscle sequencing of smiling.

When you have synkinesis after facial palsy, the brain tends to prioritise the unaffected side of the face rather than the affected side that is stiffer and harder to move. Your muscles will now have a new freedom to move which needs to be coordinated using both sides equally. You will have to learn to put a smile together with the correct pattern all over again and retrain your brain how to smile correctly.

At this stage, you need to learn to feel correct movement. This is what we are going to teach you, so you can smile confidently at others in social situations without worrying about how it looks because you know it feels right.

We do not recommend using a mirror to relearn smile because the mirror encourages you to look at the lips rather than feel what the smile muscles are doing higher up in the cheek. Do not work too hard doing these movements – the movement should feel gentle and balanced, not a strain. Remember, we smile with our cheeks not our mouth.

First, ensure your face is relaxed and do your pain free stretches all around the cheek area to make sure it is as supple and released as can be. Remember to use trigger point releases/melts in any tight, thick or painful areas as previously taught by your therapist. Keep going until the affected cheek feels as loose and supple as the unaffected cheek and you have got rid of all painful, thick trigger points – a tight, stiff muscle cannot smile gently and smoothly.

Relearning a gentle, coordinated smile

Smile is a gentle movement of the cheeks. Place your fingertips on your mid cheekbone area and do a gentle, closed-mouth smile. You should feel the muscle tighten or flex slightly underneath your fingertips and the cheek move up and slightly back. Never force the movement. Try to get the feel of your smile balanced between the left and right cheek. A smile should always be gentle and effortless.

Repeat five times daily, doing 5-10 gentle smiles each time. Make sure that the rest of the face stays nice and relaxed as you smile with your cheeks, especially the eye, forehead and neck.

Once you feel you are able to work the correct muscle then you can start to work on the smile without feeling for the muscle with your fingers. Remember to practice the movement **gently**, using low effort. This is the correct way to move your face and avoids triggering your synkinesis in other areas.

Initially there may be quite a difference between the amounts of movement on the affected side compared to the unaffected side when spontaneously smiling. However, with practice the balance and coordination of your movement will improve.

This is not something you can practice once a day. Your face is designed to work little and often and this is what you need to replicate when doing retraining. It takes time and practice to learn a new skill. You may find using triggers helpful to remind you. For example, you could do five correct gentle smiles every time you boil the kettle or are in the bathroom.

Therapy sessions will be organised to assist you with your retraining. You may still require chemodenervation (botulinum toxin) for other areas of your face, but it is important to give your face time to readjust after the surgery before restarting your chemodenervation program. This process will be ongoing until you reach a point of independence with your rehabilitation regime.

Releasing the central facial muscles

It is important to know where the muscles are in your face to release and retrain them properly. The only way to know if they need releasing is to compare them to the unaffected side therefore always start by feeling the unaffected side of the face first. If the affected side feels tighter, thicker or stiffer then release it as many times as required until it feels the same as the unaffected side. Releases should always be pain free.

Green 'orbicularis oculi' muscle – closes the eye

- Hold the eyelid closed with your index finger and stretch the brow up with the other hand. Hold for 1 minute.
- Put your index fingers next to the outer corner of your eye. Slowly pull the fingers apart (up and down) about 3 cm. Repeat for 1 minute.
- Repeat starting at the inner corner of the eye.
- Put your index fingers under the centre of the lower eyelid. Slowly pull the fingers apart (side-to-side) about 3 cm. Repeat for 1 minute.

Purple and blue nose muscles

- Gently squeeze the nose and then push slightly upwards. Hold for 1 minute.
- Put your thumb in your top lip and the index finger in the nostril and gently grip for 1 minute.

Orange 'levator' muscles – wrinkles the nose and lifts the lip into a sneer

- Place your thumb inside your mouth right up to your cheekbone with your index finger on the outside starting at the inner corner of the eye. Super slowly squeeze and glide the fingers down the side of the nose to the mouth repeating for 1 minute.
- If you find any thick tender spots, apply gentle grip pressure and hold this for 1 minute until that spot is completely relaxed ('melted').
- Repeat from the centre of the lower eyelid.

Yellow 'zygomaticus' muscles - smile

- Place your thumb inside your mouth and your index finger on the outside right up near the outer corner of your eye. Very slowly squeeze and glide the fingers down to the mouth repeating for 1 minute.
- If you find any thick tender spots, apply gentle grip pressure and hold this for 1 minute until that spot is completely relaxed ('melted').
- Repeat starting at the top of the cheekbone.

Brown 'buccinator' muscle – squeezes the inner cheek inwards and slightly back

- Place your index and middle fingers inside your mouth between your teeth and your cheek. Rest your fingers against your teeth and make a hook with the tips of your fingers hooking the cheek out and slightly forwards. Hold for 1 minute.
- Slide the fingers (in their hook position) as far forwards toward the corner of the mouth as you can before they pop out of your mouth and hold here for 1 minute – you may feel a ridge here that will gradually release.

Pink 'orbicularis oris' muscle – puckers lips, moving lips forward and in towards centre

- Place both your thumbs inside the centre of your top lip and your fingers outside gripping just above the lip line. Start with your thumbs together and pull one thumb slowly and gently out to the corner of the mouth repeating for 1 minute.
- Repeat on the lower lip but with fingers inside and thumbs outside.
- If you find any trigger points in the lips, grip gently for 1 minute to release them.

