



Hypertrophic scarring to the face impacts in many ways. Scarring not only alters appearance but can significantly affect the various functions of the face from emotional expression, oral hygiene, feeding and communication to seemingly simple acts such as breathing through the nose and opening and closing of the eyes.

Many forms of treatment methods, interventions, aids and tools are employed in an attempt to reduce and minimise the impact of hypertrophic scarring and contractures. Take a look into the 'bag of tricks' used by Occupational Therapy in the treatment of facial scarring.

### Facial Exercises

Regular daily active face and neck exercises, including manual stretching of the mouth and eyes assists with stretching tight skin and maintaining muscle strength to fight against scar contractures and potential microstomia, ectropia, entropia and neck contractures.



### Scar Massage

Massage and moisturising with sorbolene cream is commenced once wounds are healed. Daily massage is another form of pressure therapy that helps break up collagen fibres, and remodels scar tissue into smooth flat lines. Massage also aids in the desensitisation of hypersensitive new skin, and reducing itch.



### Sun Protection

Newly healed burns are vulnerable to both sun burn and the development of hyper pigmentation which is not reversible therefore patients are well educated in prevention. Daily sun cream of at least 30+ broad spectrum including a hat and sun glasses are recommended when out in the sun.



### Acrylic Face Masks

These are clear rigid face masks fabricated from a high temperature thermoplastic material, some that can also contain silicone. Although rigid, one distinct advantage is they conform better to the contours and angles of the face than a stretchy fabric mask would resulting in superior compression around the nose, mouth and eye area. Acrylic masks are usually commenced as soon as dressings are no longer required.



### Fabric Face Masks

Fabric masks are typically used at night to replace the acrylic mask, and are commenced as early as possible over low profile dressings to help minimise the formation of scarring. The masks are custom made, and can be 'open' or 'closed' depending on the extent of the burn injury to the face.



### Contact Media

Silicone dressings and creams can help to soften and flatten scarring. There are various types of contact media products that can be used depending on the size, severity and location of the scarring. Most silicone products can only be used if the wounds are fully healed however Stratamed silicone cream and Duoderm thin are known exceptions for superficially healing wounds.



### Static Neck Splinting

The development of tight bands of scarring on the neck can lead to contractures and a rapid loss of movement. Night use of static thermoplastic splinting and sleeping without a pillow are used to position the neck on stretch in the opposite direction a band of scar is pulling.



### Microstomia Mouth Splinting

Deep burns to the lips can result in serious scarring and contracture of the mouth which can significantly impact on speech, oral hygiene, facial expression, intubation and feeding, with some individuals being reduced to eating through a straw. Custom made dynamic and static mouth microstomia splints, and pre-fabricated lip expanders are used to stretch the size of the mouth.



### Nares Splinting

Scarring around the nostrils can lead to the contraction of the nares and in severe cases, nasal obstruction. Thermoplastic splints or pre-fabricated tubing has been used to hold the nares open to prevent contracting scars from reducing the size of the nares.



### Eyes

Tightening of scars over the cheeks and around the upper and lower lids can cause ectropia where the eyelashes and lower lids can turn out from the eyes. Entropia is a rare presentation where the eyelashes and lower lid rolls in towards the eye. Passive manual exercises are taught to help stretch the scarring, and taping may be introduced to apply pressure and stretch in the opposite direction to contractures. Surgical intervention is usually necessary to correct both conditions.



### Ears

Scarring of the ears is a difficult area to treat with compression. When using pressure garments the ears are either enclosed completely within the fabric mask, if tolerated, or with the use of ear domes. Early use of Stratamed silicone cream and Duoderm thin can be used for superficially healing wounds. Pressure clips can be used for smaller isolated areas of raised scarring.

