

# Orthotic Scar Management for Hands.

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# Orthotic Scar Management for Hands

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## OBJECTIVES

- Understand the construction of resting hand orthosis with addition of silicone
- Understand the utilization of silon lined thermoplastic to combine rigid position with the added benefit of silicone

## INTRODUCTION

Foremost consideration with a burn injury is wound closure. This is an achievement that comes with the threat of function and joint mobility in the hand. Scar tissue has the potential to interrupt an intricate system of soft tissue structures along the small pathways of usual function. This necessary production of scar tissue to repair the body potentiates sabotage of function. An immediate conservative measure of treatment is introducing scar tissue to silicone. This is a non-invasive proven method to improve texture, pigmentation, and height of scar tissue as well as providing hydration. Silon-lined thermoplastic material allows rigid positioning to provide a sustained stretch as an opposing force to the influence of hypertrophic scar tissue while providing the benefits of silicone. The LTS Silon material allows direct visible contact and conformity to scar features on the hand.

## METHODS/DESIGN

### Materials Needed:

- Thermoplastic material
- LTS Silon material
- Scissors
- Dense blue adhesive foam
- Strapping
- Adhesive Velcro

## RESULTS

Maximizing orthotic efforts in the burn injured hand by adding silicone is an effective immediate means of initiating scar management to optimize hand function.

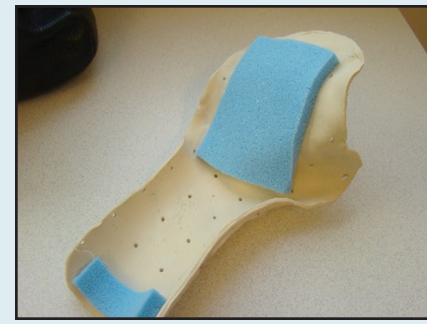
## FABRICATION



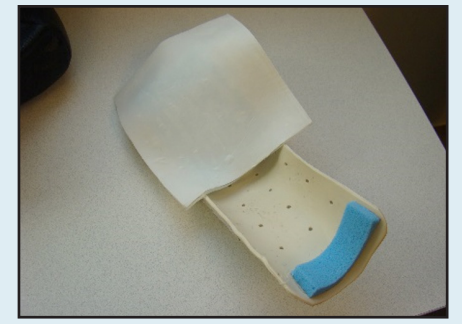
Determine areas of the affected hand that would benefit from silicone and cut LTS Silon material accordingly.



More globally consider the optimal resting position of the hand/digits and fabricate resting orthosis needed.



Carefully mold the silon side of material onto scar areas; translucency of warmed material will ensure correct placement. Reheat area of resting hand splint to adhere pre-molded Silon LTS. Be sure to adhere securely with appropriate warming of both materials.



Place dense blue foam on fabricated orthosis with warmed LTS Silon overlapped and secured around the edges encapsulating the foam. Embed affected hand into Silon LTS over foam to impress palmar/digital features targeting scar areas. Keep pressure until Silon LTS translucency is opaque/white.



Place straps and Velcro to secure hand in desired resting posture.

## Other Examples

