

Surgery | Scar Care Instructions

UNDERSTANDING SCARS

Scars form whenever something “breaks” the skin for example:

- Injury such as cut burn or deep scrape
- Disease process such as chicken pox scars
- Surgery

Once the skin has broken, the body heals by laying down fibrous or connective tissue that causes a scar to form scars usually take 12 to 18 months to fully mature. During that time, they go through a remodeling process. Many scars that are under attractive in the first few months may greatly improve over the course of a year. In the first few months, they may be pink and raised (hypertrophic) then soften, flatten, and lighten over the remaining 9 - 10 months. Scar tissue is not as strong as normal skin, and therefore, depending on location, direction intention, and may widen overtime, no matter how carefully the wound was closed. Some scars may even remain permanently thick (hypertrophic) or form an excessive amount of scar tissue (keloid) despite best efforts to minimize scarring.

If the incision has been closed with absorbable sutures and Steri-Strips, scar treatment can begin about two weeks later after the Steri-Strips have been removed if the incision is completely healed. If permanent sutures were used and sutures removal is necessary, scar treatment can begin after suture removal according to the surgeon’s recommendation.

PHASES OF SCAR TREATMENT

Early Treatment	Mid Treatment	Late Treatment
3 weeks - 1 year	1 year - 3 years	Scar Revision

TREATMENT OPTIONS FOR SCARS

There are many ways to treat a scar:

- **Time**
 - Since scars naturally improved over 12 to 18 months you may need to be patient.
- **Sun Protection (sunscreen, hats & clothing)**
 - It is very important that all scars be protected from the sun. Scars that become sunburned will remain red and unsightly for a long time, possibly permanently. It is very important to use sunscreen on all scars, especially new, and mature scars. It is also important to use hats and other clothing to protect the scars and the rest of your skin from skin damage.

- **Massage**
 - The collagen in the scar tissue remodels over the course of a year. Gentle massage can help this tissue to flatten, creating a smoother appearance. Moisturize in the form of vitamin E, cocoa butter, or lotions.

- **Expensive Scar Cream**
 - There are many expensive scar creams available in drugstores and on the Internet, there is no evidence that these creams (such as Mederma) have any effect on improving scar quality. It is likely that massage is the main important factor, we do not recommend purchasing these creams and lotions.

- **Silicone Rubber**
 - Silicone rubber is one of the most effective forms of scar therapy. Silicone products help hypertrophic scars flatten and lose their redness faster than untreated scars. A variety of products are available
 - **Silicone Gel** (such as Scar Away, Kelocote, Spectragel, New Gel) is a thick clear gel which comes out of a tube. The gel may be easier to use for scars on areas of the body with a lot of mobility, where sheets won't stick. It is also good for more obvious areas such as the face.
 - Silicone gel may be applied once or twice daily for 3-4 months. However, silicone may be recommended for longer periods of time if the scar remains red and elevated. We don't fully understand why silicone improves scars, but studies have shown that using silicone is better than leaving scars untreated. Silicone sheeting, tape and gel can be purchased at many local pharmacies. You can also find silicone products online. Look for products which are made mostly of silicone. These products should give you similar results.
 - **Silicone Sheets** (such as those from Scar Away, Biodermis, Rejuveness or Septra film) or silicone tape (such as Mepitac or Safetac available online) have a light adhesive backing and are usually held in place with tape or gauze they can be cut to the correct size over the scar and are generally used on the body and extremities.
 - Silicone sheets and silicone tape should be applied constantly for at least 3-4 months. They should be removed daily for bathing and then reapplied. If irritation develops, or if this scar is in an obvious location, the sheet can be worn at night only.

- **Steri-Strips**
 - Steri Strips (paper tape reinforced with thread) may be used to reduce scar thickening and especially scar widening. Your surgeon will show you how to apply these but in general they are placed in a way that pulls the edge of the scar together.
 - To be the most effective, the Steri-Strips or paper tape need to be in place almost constantly. Since scar widening and healing can take one year or longer, the Steri-Strips or tape will need to be used for the entire time. Some children react to the adhesive material in the tape and may see redness or blistering at the site. If this occurs, stop using the Steri-Strips for one to two weeks until the area heals, and then try using them again. If a reaction occurs again, stop using the Steri-Strips.

- **Lasers**
 - Scars that remain pink and raised may respond to pulsed yellow dye laser therapy.

Learn more about our Plastic & Reconstructive Surgery providers at:
healthcare.msu.edu/

- The light is absorbed by blood vessels in the scar and may result in softer, lighter scars. At first the scar will appear darker due to bruising caused by the rupture of the blood vessels. This bruising will fade over 2-3 weeks. It may take at least a full month to see if the laser treatment has been effective. Several treatments may be needed for best results. There is a mild to moderate stinging discomfort from the laser pulses. We apply medicated cream 20 to 30 minutes prior to the laser treatment to help make it more comfortable. Lasers are usually reserved for scars that are still pink after 12-18 months.
- **Steroid Injections**
 - Scars that remain pink and raised may respond to pulsed yellow dye laser therapy.
 - Kenalog (triamcinolone) is a long-acting local steroid injection that works to soften and may help to shrink hypertrophic or keloid scars. It takes at least one month for the steroid medication to be completely absorbed, so injections are usually spaced 4-6 weeks apart.
 - A series of injections may be needed for the best result. The injections may be uncomfortable during the procedure, but the pain goes away quickly. Your doctor will decide if the injections are a good choice for you.
- **Compression Garments**
 - Depending on the location, some scars especially burn scars may respond to gentle compression from ace wraps, sleeves, or custom fitted compression garments.
 - These garments are worn for at least 6 months or longer periods for large scars with some areas of excessive thickness, a sheet of silicone rubber can be worn beneath the compression garment. Your doctor will decide if these garments are a good choice for you.
- **Scar Revision**
 - Scars that failed to heal well may be improved by surgical scar revision these may be combined with small zig zag incisions to break up a straight-line scar or to change the direction of parts of a scar to better hide it.
 - In some cases, such as with keloid scars, scar revision may be combined with steroid injections and a few days of post operative radiation therapy to decrease the risk of the scar returning and looking the same.
 - Unfortunately, there is no guarantee that any of the above methods of treatment will result in a favorable scar. In the case of surgical scar revision there is always a chance that the new scar will be very similar or maybe even worse than the previous scar.