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Plastic and Reconstructive Surgery

General Instructions on Caring for your Scar

Scars are formed whenever the integrity of the skin has been disrupted. This could be as a result of injury (such as a laceration, a burn or a deep abrasion), as a result from a disease process (such as chicken pox scars) or resulting from a surgical procedure. Once the skin has been broken, the body heals by laying down fibrous or connective tissue causing a scar to form.

Scars usually take about 12–18 months to fully mature. During that time, they go through a remodeling process. Many scars that are unattractive in the first few months may improve dramatically 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 and tension, may widen over time, regardless of how carefully they were closed. Some scars may even remain permanently thick (hypertrophic) or form an excessive amount of scar (keloid) despite best efforts to achieve a satisfactory scar.

If the incision has been closed with absorbable sutures and steri strips, scar treatment can begin about 2 weeks later after the steri strips have been removed and the incision is completely healed. If permanent sutures were used and suture removal is necessary, scar treatment can begin after suture removal according to the surgeon's recommendations; discuss this with your surgeon.

Treatment of Scars

There are many ways to treat a scar.

Time: Since scars naturally improve over the course of 12–18 months, doing nothing except being patient may be a very effective option.

Sunscreen: It is extremely important that all scars be protected from the sun. Scars that become sunburned will remain red and unsightly for long periods of time – maybe even permanently. Therefore, it is very important that sunscreen be used on all scars, especially new, immature scars.

Massage: The collagen in the scar tissue remodels over the course of a year. Therefore, gentle massage can help this tissue to flatten, resulting in a smoother appearance. Lubrication in the form of Vitamin E, cocoa butter, skin cream or more expensive commercial products (such as Mederma) can reduce skin irritation and serve as a reminder to massage scars on a daily basis for at least 2 months. None of these lubricants have proven scar healing abilities, however. Most likely, it is the pressure from the massaging fingers that helps to flatten the scar tissue.

Silicone Rubber: Silicone rubber is one of the most effective forms of scar therapy. A variety of products are available. Silicone sheets (such as those from Biodermis, Rejuveness or Spectra film) or silicone tape (such as Mepitac) have a light adhesive back to them and are typically held in place with tape or gauze. They can be cut to the correct size to cover the scar and are generally used on the body and extremities. Silicone gel (such as Kelocote or Spectragel) is a thick, clear gel which comes out of a tube. The gel may be easier to use for scars in areas of the body with a lot of mobility, where sheets won't stick, or to cosmetically

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obvious areas (such as the face). All of these silicone products help hypertrophic scars flatten and lose their redness faster than untreated scars. 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 the scar is in a cosmetically obvious location, the sheet can be worn at night only. Alternatively, silicone gel may be used instead and applied twice daily for 3-4 months. However, silicone may be recommended for longer periods of time if the scar remains red and elevated. The mechanism by which silicone rubber affects scars is not yet fully understood. However, studies have shown a benefit over untreated scars. Silicone sheeting, tape and gel are stocked and can be purchased through many local pharmacies. You can also find a variety of silicone products available online and in our office. Look for products which are largely composed of silicone. All of these products should be similar in the effect achieved.

Lasers: Scars that remain pink and raised may respond to pulsed yellow dye laser therapy. The light is absorbed by blood vessels in the scar and may result in softer, lighter scars. Initially, 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. Multiple treatments may be necessary for best results. There is a mild to moderate stinging discomfort associated with the laser pulses. However, medicated cream to help relieve this pain, applied 20 – 30 minutes prior to the laser treatment may help to alleviate this discomfort. Lasers are generally reserved for scars that remain pink after they have matured for 12-18 months.

Steroid Injections: 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. Therefore, injections are usually spaced 4–6 weeks apart. A series of injections may be necessary for best results. The injections may be uncomfortable during the procedure, but the pain is short-lived. Your doctor will determine if these injections are appropriate for you.

Compression Garments: Depending on the location, some scars (especially burn scars) may respond to gentle compression from ace wraps, neoprene sleeves or custom fitted compression garments. These garments are worn for at least 6 months or longer. For large scars with localized areas of excessive thickness, a sheet of silicone rubber can be worn beneath the compression garment.

Scar Revision: Scars that fail to heal satisfactorily may be improved by surgical scar revision. This may be combined with small zigzag incisions to break up a straight line scar or to change the direction of parts of a scar to better camouflage it. In some cases (such as with keloid scars), scar revision may be combine with steroid injection and a few days of post operative radiation therapy to decrease the risk of recurrence of this thickened scar.

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.

If you have any questions or concerns regarding the appearance or treatments of scars, please call your Plastic Surgeon's office at 215-590-2209.