

Patient Information Sheet – Scars

Scar Formation

Scar formation is a natural part of the skin's healing process. When the dermis is penetrated following an injury, infection, skin condition, or surgical incision, fibrous scar tissue is formed. This tissue is thicker and less flexible than the surrounding healthy tissue. Scar tissue does not re-grow hair follicles or sweat glands. It is less resilient than healthy tissue, making it more vulnerable stresses such as the UV radiation in sunlight.

Scars can be a cause of distress to a patient after surgery. Scars can have an unpleasant appearance, becoming red, raised or depressed from the surrounding skin, spread, or thickened. They can also cause physical symptoms, such as tenderness or pain, decreased range of motion, and/or itching. It is important to understand that scars are a **necessary trade-off** to achieve the contour changes of aesthetic plastic surgery.

Risk Factors for Unsatisfactory Scarring

In some cases, unsatisfactory scarring cannot be explained, and it is difficult to predict which patients will scar nicely and which patients won't. Factors such as age, gender, ethnicity, skin type, and genetics can influence how your skin heals. There are also a few known factors that can make a patient more susceptible to unsatisfactory scarring:

- Family history or personal history of hypertrophic or keloid scarring
- The use of certain medications, such as immunosuppressants
- Systemic illness, such as diabetes or chronic renal failure
- Smoking within 6-8 weeks of surgery (either before **OR** after)
- Location of the wound/amount of tension on the incision
- Size of the wound/incision
- Postoperative infection of the wound
- Compromise of blood flow to the wound
- Failure to appropriately care for the wound/incision after surgery
- Exposure of the scar to UV radiation (sunlight, tanning beds, etc.)

Your surgeon will always endeavor to place scars in the least visible location possible without compromising your surgical result.

Scar Maturity

Initially, your incisions will look clean and flat, just starting the process of wound healing. Over the first few weeks, the wound heals by forming thicker, redder tissue at the incision site(s). For body surgeries, this usually peaks at around 12 weeks. The scars then continue to soften and the pink/red discoloration begins to improve. Body scars will be obvious for *at least* six months. Facial surgery scars heal more rapidly, with most scars being acceptable around 3-4 weeks after surgery.

Scar Maturity, continued

As mentioned, the healing process can vary from patient to patient, so you may find your scars require more or less time to settle. Most scars eventually become flat and fade to white, though they never disappear completely. It can take upwards of a year or more to reach this state.

Scar Treatments

- 1. Postoperative Care:** Taking proper care of a surgical wound immediately after surgery can help reduce the formation of unsatisfactory scars. This includes dressing changes, wound care as directed by our staff, skin tape or gel sheeting, and compression garments. Procedure-specific directions will be provided to you.
- 2. Silicone Sheeting and/or Tape:** These products can be applied as early as two weeks post-surgery and can help minimize hypertrophic scars, encouraging the scar to heal flat. Typically, these products are recommended for a minimum of six weeks after surgery.
- 3. Lasers/Machine Therapy:** Some lasers, including the Nd:YAG 1064nm, have shown success in treating scars. Intense pulsed light can also be used. These options are both offered at Clinic 805. Machine therapy can be utilized no sooner than 6-8 weeks after surgery, but can also be used to treat older scars.
- 4. Micropigmentation:** This involves the introduction of pigment into the dermis via small needles (also known as “permanent makeup”). Most patients require at least two treatments for the desired effect. Micropigmentation can be used for most scars that have become hypopigmented (lightened or white) with healing, including around the areola.
- 5. Intralesional Steroid Injections:** These treatments can inhibit the genes related to collagen production. Multiple injections are usually required to treat scars. These would be considered if the above treatments are unsuccessful, except for patients with keloid formation (as the above treatments are not likely to be effective). Some patients may experience some atrophy of the tissue surrounding the scar, but this typically resolves once the treatment stops.
- 6. Surgical Excision:** Scars may be partially or completely excised, especially for patients who develop hypertrophic or keloid scars. The incision may also be altered to help decrease tension and promote better healing. For patients with persistent keloid formation, radiation therapy may also be considered. It is important to note that the goal of excision is always to replace an unsatisfactory scar with a satisfactory one, but the final result of a scar is never predictable.

As you progress through the surgical process, you will be provided with more information specific to your procedure, including direct education on how best to care for your incisions.