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# SCAR REVISION

What Is Scar Revision?

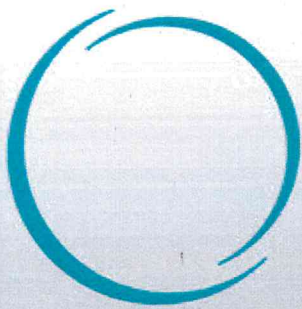
Consultation & Preparing for Surgery

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# WHAT IS SCAR REVISION?

Scar revision is performed to improve the condition or appearance of a scar anywhere on your body. After an injury or surgery, a scar will often remain as a visible sign that a wound has healed.

While scars are a natural part of healing, their development can be unpredictable. Scar revision surgery is meant to minimize the scar so that it is more consistent with your surrounding skin tone and texture. The different types of scars include:

- **Discoloration and surface irregularity scars** — These scars do not impair function or cause physical discomfort and include acne scars as well as scars resulting from minor injury and prior surgical incisions.
- **Hypertropic scars** — These scars are thick clusters of scar tissue that develop directly at a wound site. They are often raised, red and/or uncomfortable and they may become wider over time. They can be hyperpigmented (darker in color) or hypopigmented (lighter in color).
- **Keloids**— These scars are larger than hypertropic scars. They can be painful or itchy and may also pucker. Keloids extend beyond the edges of an original wound or incision. They can occur anywhere on your body, but commonly develop where there is little underlying fatty tissue, such as on the breastbone or shoulders.

- **Contractures**— These scars restrict movement due to skin and underlying tissue that pull together during healing. They occur when there is a large amount of tissue loss, such as after a burn. Contractures also form where a wound crosses a joint, restricting movement of the fingers, elbows, knees or neck.

Although scar revision can provide a more pleasing aesthetic result or improve a scar that has healed poorly, a scar cannot be completely erased.

**Scar revision can be performed at any age and is a good option if you:**

- Are bothered by a scar anywhere on your body
- Are physically healthy
- Do not smoke
- Have a positive outlook and realistic goals for your scar revision surgery
- Do not have active acne or other skin diseases in the area to be treated



## CONSULTATION & PREPARING FOR SURGERY

### ***During your consultation, be prepared to discuss:***

- Your surgical goals
- Medical conditions, drug allergies and medical treatments
- Current medications, vitamins, herbal supplements, alcohol, tobacco and drug use
- Previous surgeries

### ***Your surgeon will also:***

- Evaluate your general health status and any pre-existing health conditions or risk factors
- Examine your scar in detail
- Take photographs
- Discuss your scar revision options
- Recommend a course of treatment
- Discuss likely outcomes of scar revision surgery and any risks or potential complications

### ***Prior to surgery, you may be asked to:***

- Get lab testing or a medical evaluation
- Take certain medications or adjust your current medications
- Stop smoking
- Avoid taking aspirin, anti-inflammatory drugs and herbal supplements as they can increase bleeding

Scar revision surgery may be performed in your plastic surgeon's office using only local anesthesia. If your scarring is more significant and sedation or general anesthesia is also necessary for you to be comfortable during the procedure, it may be performed in an accredited office-based surgical facility, licensed ambulatory surgical center or hospital. If you do require sedation or general anesthesia, you will need another adult to drive you home and stay with you for the first night following the procedure.

Be sure to ask your plastic surgeon questions. It's very important to understand all aspects of your scar revision procedure. It's natural to feel some anxiety, whether it's excitement for your anticipated new look or a bit of preoperative stress. Don't be shy about discussing these feelings with your plastic surgeon.



# THE PROCEDURE

Medications are administered for your comfort during the surgical procedure. The options include local sedation, intravenous sedation and general anesthesia. Your doctor will recommend the best option for you.

**Topical treatments**, such as gels, tapes or external compression, can help in wound closure and healing or to reduce the ability of skin to produce irregular pigment. These products may be used to treat existing surface scars and discoloration and to aid in the healing of scar revision procedures.

**Injectable treatments** are often used to fill depressed or concave scars. Depending on the injectable substance used and your particular scar conditions, results may last from three months to several years. Therapy must be repeated to maintain results. One form of injection therapy uses steroidal-based compounds to reduce collagen formation and can alter the appearance, size and texture of raised scar tissue.

**Surface treatments** are most often used for cosmetic improvement of scars. These methods can soften surface irregularities and reduce uneven pigmentation. Surface treatments are a controlled means of either mechanically removing the top layers of skin or changing the nature of the tissue.

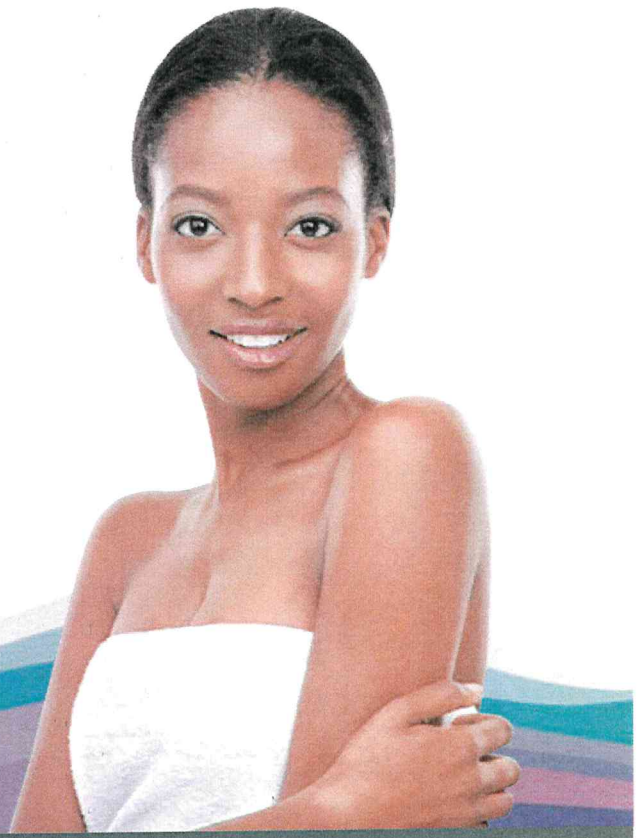
**These treatment options include:**

**Dermabrasion** is a mechanical polishing of the skin.

**Laser resurfacing** changes the surface of the skin to allow new, healthy skin to form at the scar site.

**Chemical peel solutions** penetrate the skin's surface to soften irregularities in texture and color.

**Excisions** surgically removes a scar. Closure of the resulting surface wound is referred to as "simple" closure. Layered closure is used where excision extends to tissue below the skin surface or in areas with a high degree of movement. The first step, or layer, requires sub-dermal closure (below the skin surface) with absorbable or non-removable sutures. Layers of closure continue to build, concluding with closure of the remaining surface wound.



# THE PROCEDURE

(Continued)

Advanced techniques in scar revision include complex flap closure to reposition a scar so that it is less conspicuous or to improve flexibility where contracture has restricted mobility.

**Z-plasty** is a flap technique that involves a “Z” pattern incision with multiple angles. This creates angled flaps on either side of the original scar site that can completely reposition or change scar direction, interrupt scar tension, or improve scar flexibility.

**Skin grafts or pharmaceutical tissue substances** are used if there is not enough healthy tissue present for closure of a scar excision. This is more likely with revision of severe burn scars. The graft may consist of healthy skin from other areas of your body, such as the abdomen or thigh.

**Tissue expansion** can be a substitute for skin grafts. In this procedure, an inflatable balloon, called a tissue expander, is placed under the skin near the scar site. The balloon is slowly filled with sterile solution to expand the area of healthy skin. Once the skin has grown sufficiently, the expander is removed and new skin replaces the adjacent scarred tissue.

# RISKS & SAFETY

The decision to have scar revision surgery is extremely personal. You will have to decide if the benefits will help you achieve your goals and if the risks and potential complications are acceptable. You will be asked to sign consent forms to ensure that you fully understand the procedure and any risks and potential complications.

## **The risks include:**

- Allergies to tape, suture materials and glues, blood products, topical preparations or injected agents
- Anesthesia risks
- Bleeding (hematoma)
- Change in skin sensation
- Damage to deeper structures, including nerves, blood vessels, muscles and lungs – may be temporary or permanent
- Deep vein thrombosis, cardiac and pulmonary complications
- Delayed healing
- Infection
- Pain, which may persist
- Possibility of revisional surgery
- Recurrence of an unsightly scar
- Skin contour irregularities
- Skin discoloration and swelling

These risks and others will be fully discussed prior to your consent. It's important that you address all your questions directly with your plastic surgeon.

# RECOVERY AFTER SURGERY

You will be given specific instructions that may include how to care for the surgical site, medications to apply or take orally to aid healing and reduce the risk of infection, specific concerns to look for at the surgical site or in your general health, and when to follow up with your plastic surgeon. The initial healing phase of a surgical scar revision may include one to two weeks of localized swelling, discoloration or discomfort. As the new scar heals for several weeks, it will slowly refine and fade. With dermabrasion, chemical peel or laser resurfacing, you will experience similar conditions at the treated area, in addition to overall sensitivity.

Avoid sun exposure and follow all postoperative instructions carefully, including cleansing and at-home treatment regimens. Your compliance with postoperative instructions will influence the outcome of your surgery. It's important that the surgical incisions are not subjected to excessive force, swelling, abrasion or motion during the time of healing.

Be sure to ask your plastic surgeon questions. It's very important to understand all aspects of your scar revision procedure. It's natural to feel some anxiety, whether it's excitement for your anticipated new look or a bit of preoperative stress. Don't be shy about discussing these feelings with your plastic surgeon.

## RESULTS

When your procedure is finished, bandages or dressings may be applied to keep the surgical site clean. The final results of your scar revision surgery will be long-lasting; however, it may take several months for your final results to become apparent and, in some cases, it may take a year for the new scar to fully heal and fade. Although good results are expected from your procedure, there is no guarantee. In some situations, it may not be possible to achieve optimal results with a single surgical procedure and another surgery may be necessary.





# COST

Prices for scar revision procedures can vary. A surgeon's cost may be based on his or her experience, the type of procedure used and the geographic location of the office. Many plastic surgeons offer patient financing plans, so be sure to ask.

**Cost may include:**

- Anesthesia fees
- Hospital or surgical facility costs
- Medical tests
- Post-surgery garments
- Prescriptions for medication
- Surgeon's fee

Most health insurance does not cover cosmetic surgery or its complications.

**Your satisfaction involves more than a fee:**

When choosing a plastic surgeon for a scar revision procedure, remember that the surgeon's experience and your comfort with him or her are just as important as the final cost of the surgery.

Plastic surgery involves many choices. The first and most important is selecting an ASPS member surgeon you can trust. ASPS member surgeons meet rigorous standards:

- Board certification by the American Board of Plastic Surgery® (ABPS) or in Canada by The Royal College of Physicians and Surgeons of Canada®

- Complete at least six years of surgical training following medical school with a minimum of three years of plastic surgery residency training
- Pass comprehensive oral and written exams
- Graduate from an accredited medical school
- Complete continuing medical education, including patient safety each year
- Perform surgery in accredited, state-licensed, or Medicare-certified surgical facilities

**Do not be confused by other official sounding boards and certifications.**

The ABPS is recognized by the American Board of Medical Specialties (ABMS), which has approved medical specialty boards since 1934. There is no ABMS-recognized certifying board with "cosmetic surgery" in its name. By choosing a member of The American Society of Plastic Surgeons, you can be assured that you are choosing a qualified, highly trained plastic surgeon who is board-certified by the ABPS or The Royal College of Physicians and Surgeons of Canada.

This brochure is intended strictly for educational purposes. It is not intended to make any representations or warranties about the outcome of any procedure. It is not a substitute for a thorough, in-person consultation with a board certified plastic surgeon.



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