

Scar Revision



AMERICAN SOCIETY OF
PLASTIC SURGEONS®

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 of a wound that 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.

Hypertrophic 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 hypertrophic 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 are most commonly found on the chest, shoulders, earlobes, and face.

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 for you if you:

- Are bothered by a scar anywhere on your body
- Have functional impairment or pain from the scar
- Are physically healthy
- Do not smoke or vape
- 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

Be prepared to discuss the following during your consultation:

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

Your plastic 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



Scar revision surgery may be performed in an accredited outpatient facility or in an ambulatory surgical center or a hospital. Prior to surgery, you may be asked to:

- Have a physical examination, including lab work
- Take certain medications or adjust your current medications
- Stop smoking or vaping*
- Avoid taking aspirin and certain anti-inflammatory drugs, as they can increase bleeding

**Smoking decreases blood flow, which can impede wound healing and increase the risk of infection.*

Be sure to ask your plastic surgeon questions. It's very important to understand all aspects of your scar revision surgery, especially regarding your personal health history. 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

Scar revision surgery typically involves removing the existing scar and reconstructing the affected area to reduce its visibility and improve its alignment with surrounding tissue.

The specific technique used will depend on the location, size, and type of scar, but may include methods such as excision, skin grafting, or tissue mobilization.

The procedure is usually performed under local or general anesthesia and recovery time can vary, depending on the extent of the surgery.

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 several months to several years. Therapy may 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.

Excision surgically removes a scar. The surrounding skin and tissues are then reapproximated to create a new scar.

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 a 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 is extremely personal. You will have to decide if the benefits will achieve your goals and if the risks and potential complications are acceptable. Your surgeon should review with you the relevant risks for your specific procedure and implant type.

You may be asked to sign a consent form to ensure that you fully understand the procedure and any risks and potential complications.

Risks can 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

All risks will be fully discussed prior to your consent. It is important that you address all your questions directly with your plastic surgeon.

Recovery & Results

Recovery from scar revision surgery typically involves a period of healing and rehabilitation. Immediately after the procedure, the area may be swollen, bruised, and tender. Pain can usually be managed with over-the-counter or prescription medication. Your surgeon may also apply a dressing or bandage to protect the area and promote healing.

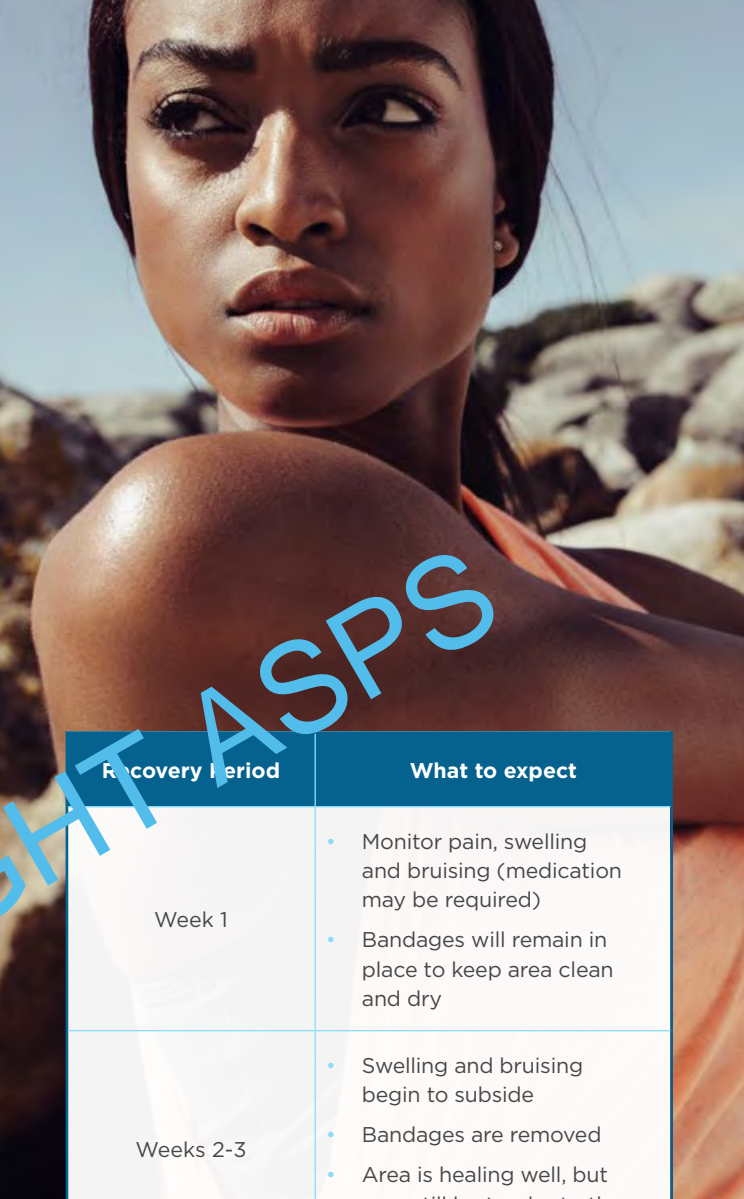
During the first few days after surgery, it is important to keep the area clean and dry and to follow any other instructions provided by the surgeon. As the incision begins to heal, you will be able to gradually return to normal activities. However, it is important to avoid strenuous exercise or other activities that could cause the incision to reopen. You should avoid sun exposure to the scar for at least six months, as sunlight can cause hyper pigmentation (darkening) of a scar.

Be sure to ask your plastic surgeon specific questions about what you can expect during your individual recovery period.

- Where will I be taken after my surgery is complete?
- What medication will I be given or prescribed after surgery?
- Will I have dressings/bandages after surgery?
- When will they be removed?
- When can I resume normal activity and exercise?
- When do I return for follow-up care?

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.



Recovery Period	What to expect
Week 1	<ul style="list-style-type: none">• Monitor pain, swelling and bruising (medication may be required)• Bandages will remain in place to keep area clean and dry
Weeks 2-3	<ul style="list-style-type: none">• Swelling and bruising begin to subside• Bandages are removed• Area is healing well, but may still be tender to the touch
Weeks 4-5	<ul style="list-style-type: none">• Start light exercise such as walking or swimming• Avoid strenuous activity and sun exposure
Week 6 and beyond	<ul style="list-style-type: none">• Return to normal activities• Followup with surgeon for checkups and to monitor healing process

Cost

Prices for scar revision surgery can vary. A surgeon's cost may be based on his or her experience, the type of procedure used, and geographic office location.

Cost may include:

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

Health insurance will sometimes cover scar revision surgery if there is pain or functional impairment. Please ask your surgeon for a complete picture of the costs you can expect for your procedure. Many plastic surgeons offer patient financing plans.

Your satisfaction involves more than a fee:

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

Words to know

- **Chemical peel solutions:** Substances that penetrate the skin's surface to soften irregularities in texture and color.
- **Contractures:** Scars that restrict movement due to skin and underlying tissue that pull together during healing and usually occur when there is a large amount of tissue loss, such as after a burn.
- **Dermabrasion:** Mechanical polishing of the skin.
- **Excision:** Surgical removal of a scar.
- **General anesthesia:** Drugs and gases used during an operation to relieve pain and alter consciousness.
- **Hyperpigmented scar:** A scar that is darker in color.
- **Hypertrophic scar:** Thick clusters of scar tissue that develop directly at a wound site.
- **Hypopigmented scar:** A scar that is lighter in color.
- **Intravenous sedation:** Sedatives administered by injection into a vein to help you relax.
- **Keloids:** Large scars that can be painful or itchy, and may also pucker which can occur anywhere on your body, developing more commonly where there is little underlying fatty tissue, such as on the breastbone or shoulders.
- **Laser resurfacing:** A method to change the surface of the skin that allows new, healthy skin to form at the scar site.
- **Local anesthesia:** A drug injected directly to the site of an incision during an operation to relieve pain.
- **Skin grafts:** Healthy skin taken from other areas of your body, such as the abdomen or thigh, to revise a scar.
- **Tissue expansion:** A procedure that can substitute for skin grafts. An inflatable balloon called a tissue expander is placed under the skin near the scar site to stretch additional skin to be used to revise a scar. Oftentimes, multiple procedures are needed.
- **Z-plasty:** A surgical technique that 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.

Questions to ask my plastic surgeon

- ☐ Are you certified by the American Board of Plastic Surgery?
- ☐ Are you a member of the American Society of Plastic Surgeons?
- ☐ Were you trained specifically in the field of plastic surgery?
- ☐ How many years of plastic surgery training have you had?
- ☐ Do you have hospital privileges to perform this procedure? If so, at which hospitals?
- ☐ Is the office-based surgical facility accredited by a nationally- or state-recognized accrediting agency, or is it state-licensed or Medicare-certified?
- ☐ Am I a good candidate for this procedure?
- ☐ What will be expected of me to get the best results?
- ☐ Where and how will you perform my procedure?
- ☐ What surgical technique is recommended for me?
- ☐ How long of a recovery period can I expect, and what kind of help will I need during my recovery?
- ☐ What are the risks and complications associated with my procedure?
- ☐ How are complications handled?
- ☐ What are my options if I am dissatisfied with the outcome?
- ☐ Do you have before and after photos I can look at for this procedure and what results are reasonable for me?

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Make the Right Choice

Plastic surgery involves many choices. The first and most important is selecting a member of the **American Society of Plastic Surgeons (ASPS)**.

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.



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