

Scar Revision Roundtable

Prominent plastic and cosmetic surgeons speak out on how they handle revision work

By Janine Ferguson

Scar revision can be one of the most complex aesthetic procedures. Depending upon the severity and location of the scar, an extensive combination of techniques may be employed.

Once the skin layers heal, the scar is permanent. However, depending on the location and type of scar, as well as the patient's skin pigmentation and the age of the scar, scar revision may be an option to remove or reduce the appearance of a scar. It can also restore function and/or correct disfigurement.

Some variations on scar revision include laser therapy, Z-plasty, skin grafting, and dermabrasion. All of these options involve risks to the patient, as well as the possible recurrence or worsening of the scar.

TIMING AND SURGERY

"When looking at a scar, the first question you have to ask is, to whom is it unsatisfactory?" asks Jane Petro, a cosmetic surgeon based in Boston. "Patients always hate scars when they bring them to your attention. But in fact, the scar may represent the best healing possible. So, history of the injury, course, and duration of the healing process must be analyzed if repeating unsuccessful outcomes are to be avoided," she explains.

"At 6 weeks after any incision in the skin, all scars will look unsatisfactory, and that appearance may continue for several months," Petro continues. "Thereafter, the question is, 'What about if the scar is unsatisfactory?'"

"A simple line, with redness and some thickness, may just be slight hypertrophy, and time, massage, silicone sheeting, or triamcinolone injections will all result in improvement. A thicker line, with more redness, itching, pain, and tenderness may be an early keloid, helped again with the above but requiring careful monitoring.

"With these scars, before surgical revision is decided, it is important to determine why it remains red and raised. Was

"Scars are evidence of Nature's repair process. Every injury, every surgical invasion will stimulate and incite a near-miraculous system by which tissue is welded together."

—Robert Kotler, MD, FACS



there a reaction to the suture material? Is the patient a picker? Is it in an area of the body notorious for such scars—anterior chest, shoulder areas, earlobes? Was there delayed healing the first time, or wound infection?

"Positive answers in these areas should result in a surgical plan designed to avoid repeating those issues. Careful surgery, good approximation, use of monofilament suture with low reactivity—avoid Vicryl and Chromic sutures—avoidance of tension, and close follow-up for several months are essential."

One of the most controversial points of scar surgery is when to perform the revision. There are many factors a doctor must take into consideration when looking at how to treat a scar, according to Loren Schechter, MD, FACS, chief, Division of Plastic Surgery at Chicago Medical School.

"Timing and technique may be dictated

by the nature of the scar," he says. "If, for example, the scar causes a functional problem (such as eyelid malposition leading to exposure keratitis), a revision procedure may have to be done sooner rather than later. If, however, the scar has healed uneventfully, and presents only a cosmetic concern, in general I prefer to allow the scar to mature—that is, soften, flatten, and fade prior to considering scar revision."

During that time, scar massage, sun avoidance, and topical gel sheeting or creams may be helpful in expediting scar maturation, Schechter advises. "In adults, I tend to wait a minimum of 6 months, but ideally 9 to 12 months prior to performing a surgical scar revision. This time frame may be extended in children even up to 2 years."

As such, he will consider surgery in specific cases when treating a scar. "I generally consider surgical scar revision if