SCARS ARE DIFFICULT TO TREAT. IS THERE ANYTHING NEW??

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SURGICAL TREATMENT OF KELOID & PAINFUL HYPERTROPHIC SCARS
Normal Scar
Normal Scar
Hypertrophic Scar
Keloidal Scar
SHALLOW, TIGHT or SUTURES LEFT IN TOO LONG

Types of Scars

- DEPRESSED & HYPERPIGMENTED
- HYPERPIGMENTED KELOID
- HYPOPIGMENTED
- ELEVATED w/ INCLUSION CYST
- IRREGULAR CLOSURE DEFECT
OTHER DIFFICULT SCARS

Keloid, Hypertrophic, Burn
Treatment Options

- Leave the Scar Alone
- Conservative Medical Management
  - Scar manipulation and massage
  - Physical modalities
  - Cica-Care® scar treatment
  - Injections
- Surgical Treatment
SCAR MANAGEMENT

“A disgruntled patient without a surgical scar is much better off than a disgruntled patient with a surgical scar.”
Excision Options

- Simple Fusiform Excision
- Simple Transfer Flap
- W-plasty Procedure
- Short Wavy Incision Method (SWIM)
- Geometric Broken Line Closure (GBLC)
Excision Options

- Simple Fusiform Excision
  CPT # 11421-6
- Simple Transfer Flap
- W-plasty Procedure
- Short Wavy Incision Method (SWIM)
- Geometric Broken Line Closure (GBLC)
A. Excision  B. SubQ Closure  C. Steri-Strips  D. Immediate Postoperative
Simple Excision

Painful Hypertrophic Scar
Clean Smooth Edges
3-mm Extramarginal
Suture Removal in Stages
6 weeks postoperative scar revision
Before Excision


After Excision
“3-5 mm scar margin excision (extramarginal) had lower recurrence rate than intramarginal or narrow excision of hypertrophic scars”
KELOID SCARS


Keloid scar removal with *intramarginal* excision followed by local hydrocortisone had lower recurrence rate than *extramarginal* excision of keloid scars alone.
Topical Silicone Sheeting
May be used on new or old scars

Apply Silicone Gel Sheeting continuously, removing for bathing or therapy. When sheet becomes worn or damaged, replace with new piece.
Cica-Care® Scar Treatment

Before Cica-Care

After Cica-Care
Cica-Care® Scar Treatment

Before Cica-Care

After Cica-Care
3 weeks of silastic gel sheeting
Cica-Care® Scar Treatment

Before Cica-Care

After Cica-Care

6 weeks of silastic gel sheeting
Cica-Care® Scar Treatment

Before Cica-Care

After Cica-Care

6 weeks of silastic gel sheeting
Excision Options

- Simple Fusiform Excision
- Simple Transfer Flap
- W-plasty Procedure
- Short Wavy Incision Method (SWIM)
- Geometric Broken Line Closure (GBLC)
Simple Transfer Flap
Scar Procedure: CPT #14040
3 Similar but Different Scar Excisions

- W-Plasty
- Short Wavy Incisional Method (SWIM)
- Geometric Broken Line Closure (GBLC)

CPT #14040
“A Straight or Linear Scar is Much More Visible to the Eye Than a Curved or Irregular Shaped Scar”
W-plasty Scar Procedure

W-plasty

Fig. 14.32  Prevention of dog-ear deformity. At the ends of the running W-plasty the size of the triangles should be reduced to prevent dog-ear deformity.

Fig. 14.33  Either an M-plasty or a Z-plasty may be performed at the end of the running W-plasty to avoid dog-ears or obtain greater extension of the closure, respectively.

W-plasty Scar Procedure
Small Wave Incision Method (SWIM)

Short Wavy Incision Method

Short Wavy Incision Method

Before and After SWIM Procedure

GBLC
Geometric Broken Line Closure

Geometric Broken Line Closure
“A Straight or Linear Scar is Much More Visible to the Eye Than a Curved or Irregular Shaped Scar”

Scar Excision with GBLC and Silastic Gel Sheeting

Linear
Irregular
Linear
Irregular

“A Straight or Linear Scar is Much More Visible to the Eye Than a Curved or Irregular Shaped Scar”

Scar Excision with GBLC and Silastic Gel Sheeting

Dovetail-Plasty

Modified Dovetail-Plasty

Z-plasty Procedure for *Contracted* Scar

CPT #14040
$60^\circ$ is the Optimal Angle
60° Angle gives 75% Length
Painful contracted scar and mallet toe deformity
Postoperative scar excision with Z-plasty and toe correction
4 weeks postoperative: start scar care
Fig. 1. (Above) Conventional Z-plasty and postoperative change of the scar (above, left and center). In conventional Z-plasty, a scar perpendicular to the relaxed skin tension line (thin parallel lines) is realigned parallel to the line. (Above, right) Thus, we can expect the central limb to become inconspicuous. However, since the lateral limbs form a steep angle against the relaxed skin tension line, they tend to become hypertrophic over time. (Below) In our technique, each limb of the flap forms a lazy S shape, so the lateral limbs are less likely to become hypertrophic postoperatively.

POSTOPERATIVE SCAR CARE

Scars and Suture Tracks Can be Treated Effectively with Silicone Sheeting Gel

Schrudde Single Lobe Rotation Flap

CPT #14040

After Scar Revision & Plastic Correction

- Initial Non-adherent Dressing of Owen’s Silk or Mepitel® Dressing
- Secondary Sterile ¼ inch Felt Pad
- Sterile Gauze and Wraps
CONCLUSIONS:

There are many options for treating all scars that are symptomatic, functionally inhibiting, or unacceptable to the patient and surgeon.

Although there's a lot of anecdotal information about specific ingredients (such vitamin E) to reduce scars, most of it is not supported by research.


The effects of topical vitamin E on patients who had undergone operation for post-burn contractures indicated that there were no appreciable effects.


This study shows that there is no benefit to the cosmetic outcome of scars by applying vitamin E after skin surgery and that the application of topical vitamin E may actually be detrimental to the cosmetic appearance of a scar.


Early topical application of vitamin E in scar management may cause reduction of the tensile strength of the wound leading to stretched scars and possible dehiscence from diminished wound healing.


Topical Vitamin E products commonly used by patients have failed to demonstrate any significant benefits in improving final scar outcomes.


Despite a lot of investigations and researches performed to identify and clarify the exact effects of vitamin E on hypertrophic scars, there have been no undisputed results about the clinical impact of its usage.


There is not yet sufficient evidence that topical vitamin E has a significant beneficial effect on scar appearance....
SURGICAL TREATMENT OF KELOID & PAINFUL SCARS

THANK YOU!

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