

# STEP BY STEP

## SCAR MANAGEMENT GUIDELINES

### STEP 1

After wound closure

Ensure sufficient UV protection (SPF)

#### PREVENTIVE MEASURES

- Hydrate skin thoroughly
- Start with silicone therapy (SCARBAN)

Consider taping or pressure therapy

### LINEAR / WIDESPREAD

6 weeks – 3 months

#### NORMAL SCAR DEVELOPMENT

Stop after 3 months

#### EARLY HYPERTROPHY

Continue/intensify

##### STEP 1

- Start pressure therapy

No surgery without (indications of) functional limitations

Consider intralesional corticosteroids for extended hypertrophy

### STEP 2

### KELOID

4 weeks – 6 months

#### NORMALISATION OF SCAR

Continue as long as required

#### GROWING KELOID

Continue/intensify

##### STEP 1

- Start pressure therapy
- Start intralesional corticosteroids

Consider combining with 5-FU, bleomycin or verapamil

### STEP 3

After 6 months

#### NORMAL SCAR DEVELOPMENT

Stop therapy

#### CONTINUED HYPERTROPHY

Continue/intensify

##### STEP 1 + STEP 2

- Start intralesional corticosteroids

Consider combining with 5-FU

Consider contracture surgery

After 12 months

#### NORMALISATION OF SCAR

Continue as long as required

#### KELOID DOES NOT RESPOND

Consider surgery in combination with radiotherapy or intralesional cryotherapy

After wound closure

##### STEP 1

### STEP 4

After 12 months

#### PERMANENT HYPERTROPHY

Consider scar correction

After wound closure

##### STEP 1

**BAPSCARCARE**  
Professional scar treatment

#### Disclaimer:

This treatment plan is a simplified rendition of published European Scar Treatment Guidelines.<sup>1,2</sup>  
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# STEP BY STEP

## SCAR MANAGEMENT GUIDELINES

**Perfect scar healing (not raised, neutrally coloured, complaint-free) is not a matter of course. A number of factors increase the risk of abnormal scar formation.**

### Two important factors in scar treatment:

- 1 The patient's aesthetic concerns (e.g. face/throat/chest)
- 2 The risk of abnormal scar development

**Therefore pay extra attention to risk factors such as:<sup>3,4,5</sup>**

- |                       |  |
|-----------------------|--|
| <b>Initial trauma</b> | Deeper wounds, irregular wounds, surgical wounds which are not parallel to skin lines.   |
| <b>Wound healing</b>  | Delayed wound-closing, e.g. as a result of complications such as infections or inflammation.   |
| <b>Localisation</b>   | Locations with increased risk of tension at wound edges, e.g. sternum, (upper) back, shoulders and joints.   |
| <b>Age</b>            | Scars on children/young adolescents often develop abnormally as a result of healing (too) quickly.   |
| <b>Skin colour</b>    | People with a darker skin colour have an increased risk of developing abnormal scars. This also applies to (red-haired) people with a light skin colour. |
| <b>Heredity</b>       | Genetic factors can play a role in abnormal scar formation.  |

### IMPORTANT!

For patients with one (or more) risk factors present, always start, directly after the wound has healed closed, with **optimal prevention**



**STEP 1**

*Always monitor the development of the scar closely!*

### References:

- 1) Middelkoop E, Monstrey S, Et al. (2011) *Scar management practical guidelines. Maca-Cloetens. 1-109.*
- 2) Mustoe TA, et al. International Clinical Recommendations on Scar Management. *Plastic and reconstructive surgery, 2002.*
- 3) Burd A, Huang L, (2005) Hypertrophic Response and Keloid Diathesis: Two Very Different Forms of Scar. *Plast. Reconstr. Surg. 116(7):150e-157e.*
- 4) Butzelaar L, et al. Currently known risk factors for hypertrophic skin scarring: A review. *Journal of Plastic, Reconstructive & Aesthetic Surgery, 2016.*
- 5) Wolfram, D, et al. Hypertrophic Scars and Keloids - A Review of Their Pathophysiology, Risk Factors, and Therapeutic Management, *Dermatologic Surgery 2009.*

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