

# BEYOND THE SCAR™

## SCARRING MANAGEMENT PROTOCOLS

### CLINICAL FLOWCHART (MEDICALLY LED)

## SCARRING

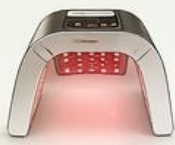
Assess scar age, type and characteristics

**SCAR AGE  
6 MONTHS OR LESS**

1

**PROTOCOL 1**  
EARLY HEALING PHASE

**LED PHOTOTHERAPY ONLY**



**DEVICE OPTIONS**

Dermalux Tri-Wave MD  
(in-clinic)

Dermalux Flex  
(at-home use)

**LED PHOTOTHERAPY DETAILS**



**Wavelengths:** Blue 415nm,  
Red 633nm, Near Infrared 830nm



**Treatment Time:** 20 minutes



**Frequency:** 2–3 sessions per week



**Duration:** 4–6 weeks



**Maintenance:** Once weekly  
for continued scar optimisation

**CLINICAL RATIONALE**

LED photobiomodulation:

- ✓ Increases ATP production
- ✓ Stimulates fibroblast activity
- ✓ Increases collagen synthesis
- ✓ Reduces inflammation
- ✓ Accelerates wound healing
- ✓ Improves collagen organisation

**EXPECTED OUTCOMES**



Reduced erythema



Improved healing



Reduced scar formation



Improved collagen organisation

### ⊗ CONTRAINDICATIONS

- ⊗ Active infection
- ⊗ Open wound / not epithelialised
- ⊗ Suspected recurrence
- ⊗ Untreated skin cancer
- ⊗ Isotretinoin within 6 months
- ⊗ Pregnancy (microneedling caution)
- ⊗ Keloid-prone individuals (relative)

### 🎯 TREATMENT ENDPOINTS

- ✓ Flattened scar
- ✓ Reduced erythema
- ✓ Improved texture
- ✓ Improved pliability
- ✓ Improved cosmetic blending
- ✓ Improved patient confidence

### ℹ IMPORTANT NOTES

- Always perform a full consultation and photograph.
- Patch test if using topical anaesthetics.
- Strict aseptic technique for microneedling and injections.
- Sun protection (SPF 50) essential during treatment course.
- Results typically seen after 2–3 sessions depending on scar.

### 📖 REFERENCES

1. Mustoe TA, et al. International Clinical Recommendations on Scar Management. *Plast Reconstr Surg.* 2002;110(2):560-571.
2. Gold MH, et al. Updated international clinical recommendations on scar management. *Dermatol Surg.* 2014;40(8):825-831.
3. DermNet NZ. Intralesional injection. <https://dermnetnz.org/topics/intralesional-injection>
4. Dermalux. Tri-Wave MD Protocol Manual. Praxisdienst. 2023.

**SCAR AGE  
MORE THAN 6 MONTHS**

2

**PROTOCOL 2**  
ESTABLISHED SCAR PHASE

**COMBINATION THERAPY**  
MICRONEEDLING + LED PHOTOTHERAPY



**MICRONEEDLING SESSIONS**

**DEPTH GUIDE**

- Face (thin skin): 0.5 – 1.0 mm
- Facial scars: 1.0 – 1.5 mm
- Thick surgical scars: up to 2.0 mm

**END POINT**

Uniform erythema with  
pinpoint bleeding



**SESSIONS:** 3 sessions *minimum*



**INTERVAL:** 4 weeks apart



**DEVICE:** Medical microneedling pen

**LED PHOTOTHERAPY (POST NEEDLING)**

**DEVICE:** Dermalux Tri-Wave MD (in-clinic)



**TIMING:** Immediately post procedure



**FREQUENCY:** After every microneedling  
session



**ADDITIONAL LED:** Weekly between  
sessions

**SAMPLE SCHEDULE**

Week 0	Microneedling + LED
Week 1	LED
Week 2	LED
Week 3	LED
Week 4	Microneedling + LED
Repeat cycle	

**CLINICAL RATIONALE**

- ✓ Microneedling stimulates collagen type I & III, breaks fibrotic bands and remodels scar tissue
- ✓ LED enhances healing, collagen maturation, reduces inflammation and improves vascular modulation

**EXPECTED OUTCOMES**



Improved texture



Softer, more pliable scar



Reduced redness



Improved cosmetic appearance

**SCAR AGE  
MORE THAN 9 MONTHS  
& RAISED / HYPERTROPHIC**

3

**PROTOCOL 3**  
HYPERTROPHIC SCAR PHASE

**COMBINATION THERAPY**  
KENALOG INJECTION +  
MICRONEEDLING + LED PHOTOTHERAPY

1



**KENALOG (TRIAMCINOLONE)  
INJECTION**

**DOSE GUIDELINES**

- Facial scars: 2.5 – 5 mg/ml
- Moderate hypertrophic scar: 5 – 10 mg/ml
- Thick, raised scar: 10 – 20 mg/ml  
(Up to 40 mg/ml for bulky lesions\*)



**VOLUME:** 0.1 – 0.2 ml per cm<sup>2</sup>



**DEPTH:** Mid-dermis / intralesional



**FREQUENCY:** Every 4 – 6 weeks



**MAXIMUM:** 2 – 3 sessions

2



**ALLOW HEALING**

Wait 2 – 4 weeks  
to allow scar softening

3



**MICRONEEDLING SESSIONS**

**DEPTH:** 1.0 – 2.0 mm depending  
on scar thickness

**SESSIONS:** 3 sessions *minimum*

**INTERVAL:** 4 weeks apart

4



**LED PHOTOTHERAPY  
(POST NEEDLING)**

**DEVICE:** Dermalux Tri-Wave MD (in-clinic)

**TIMING:** Immediately post procedure

**FREQUENCY:** After every microneedling  
session + weekly between sessions

**CLINICAL RATIONALE**

Kenalog reduces collagen overproduction and scar bulk. Microneedling remodels tissue. LED accelerates healing and optimises results.

**EXPECTED OUTCOMES**



Reduced  
thickness



Improved  
texture



Flattened,  
softer scar



More even  
skin tone

