

# Dermapen®

Fractional Micro Needling System



FDA Registered



# Dermapen®

## What is the Dermapen?

The **Dermapen** is an automated-micro needling therapy system that vertically pierces the skin to naturally stimulate collagen and elastin with minimal epidermal damage. This enhances rejuvenation results and is far safer for the client because there is much less epidermal damage.

The **Dermapen's** automatic vibrating function increases the effectiveness of treatment by increasing absorption of products, while reducing pain and discomfort.

The **Dermapen** is just as effective and can be used in combination with fractional lasers, IPL, and chemical peels.



# Dermapen<sup>®</sup> Advantage

- No cross infection - disposable needles
- Speed - faster than manual applications
- Shorter treatment times
- Adjustable needle depth
- Less pain
- Lightweight hand-piece
- Easy to use
- Lower price of consumables
- No side effects
- User independent

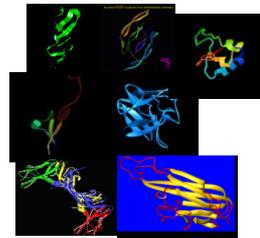
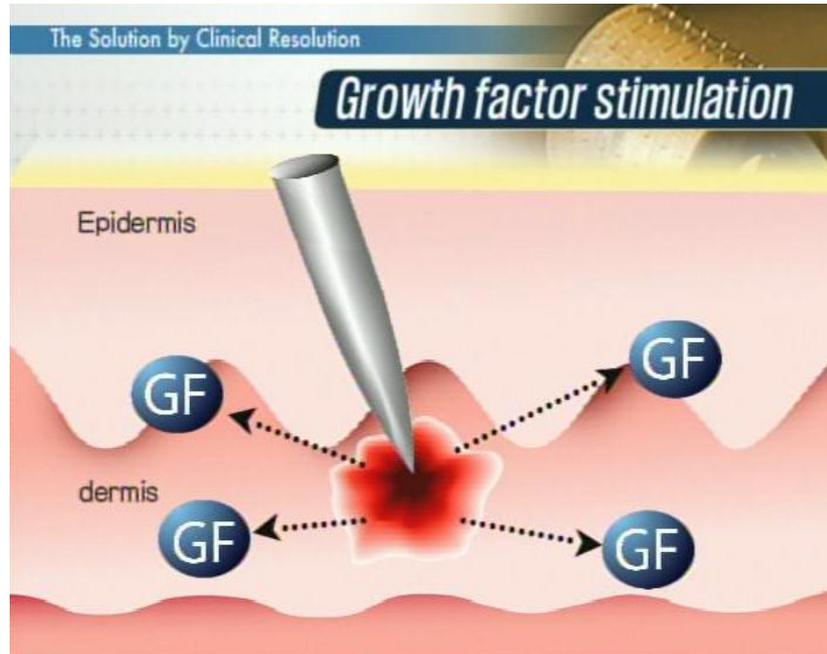
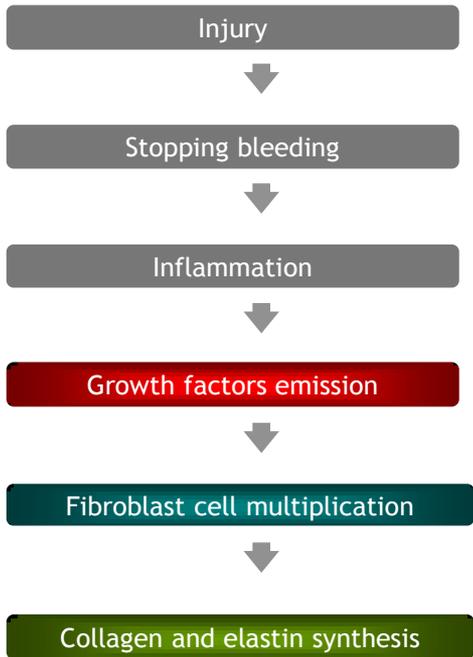


# Dermapen<sup>®</sup> Application and Effect

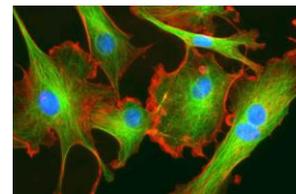
- Skin tightening, lifting and rejuvenation
- Improves acne scars and wound healing
- Improves wrinkles and fine lines
- Minimizes pore size
- Improves stretch marks
- Treats and improves alopecia



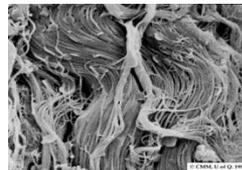
# How **Dermapen**<sup>®</sup> Works



Growth factor emission

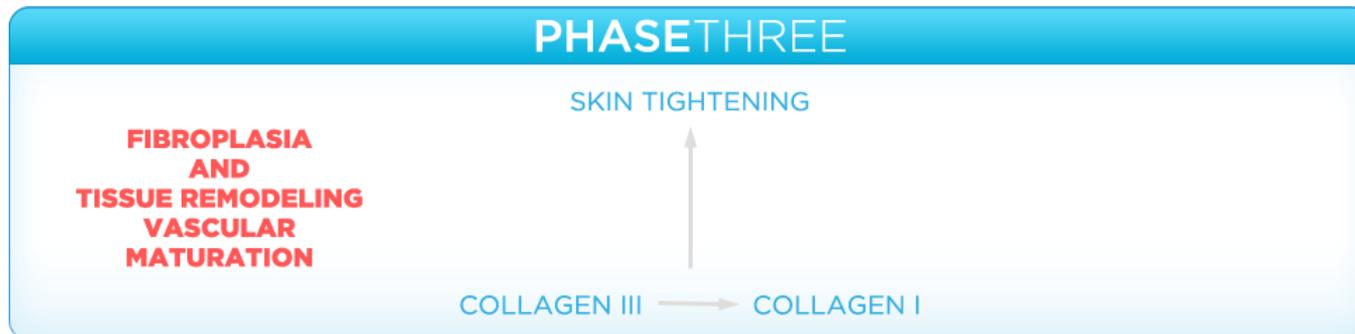
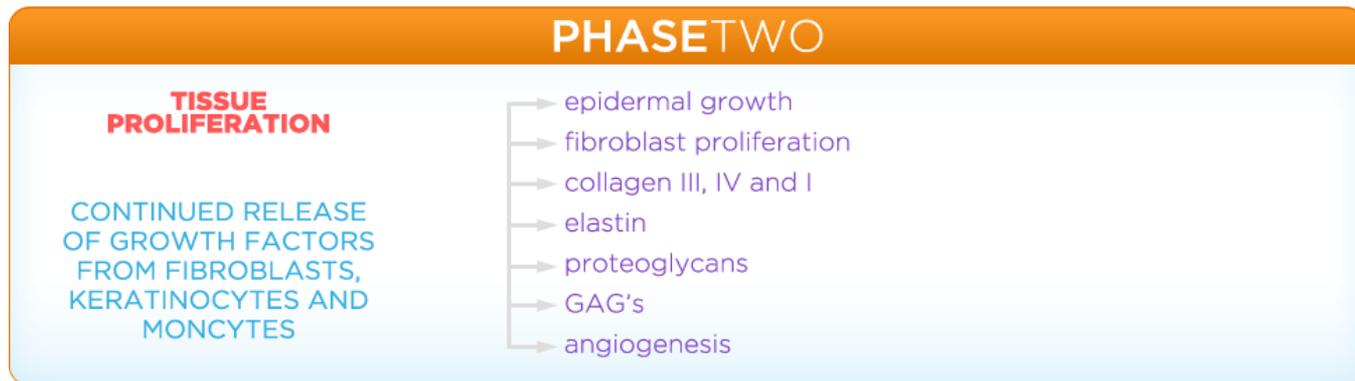
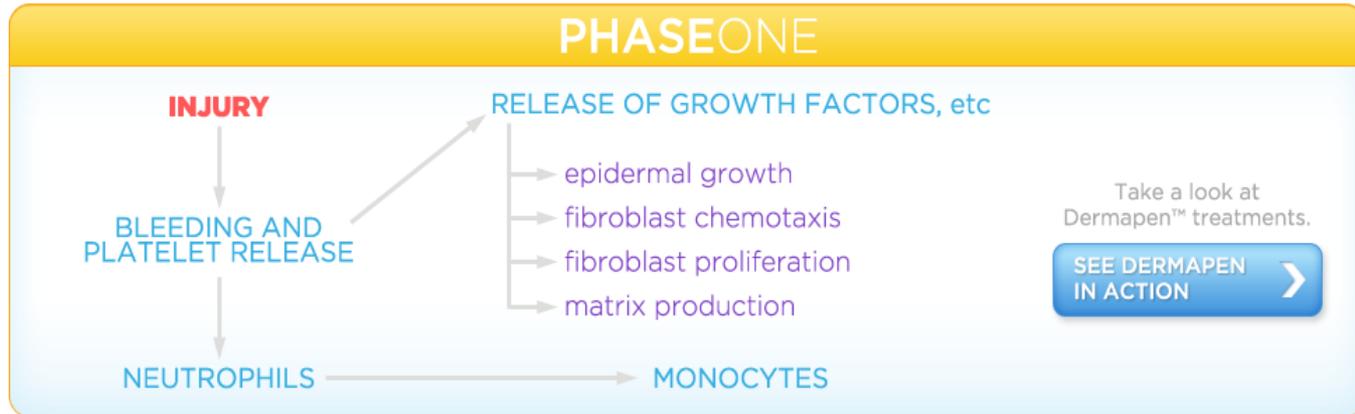


Fibroblast proliferation



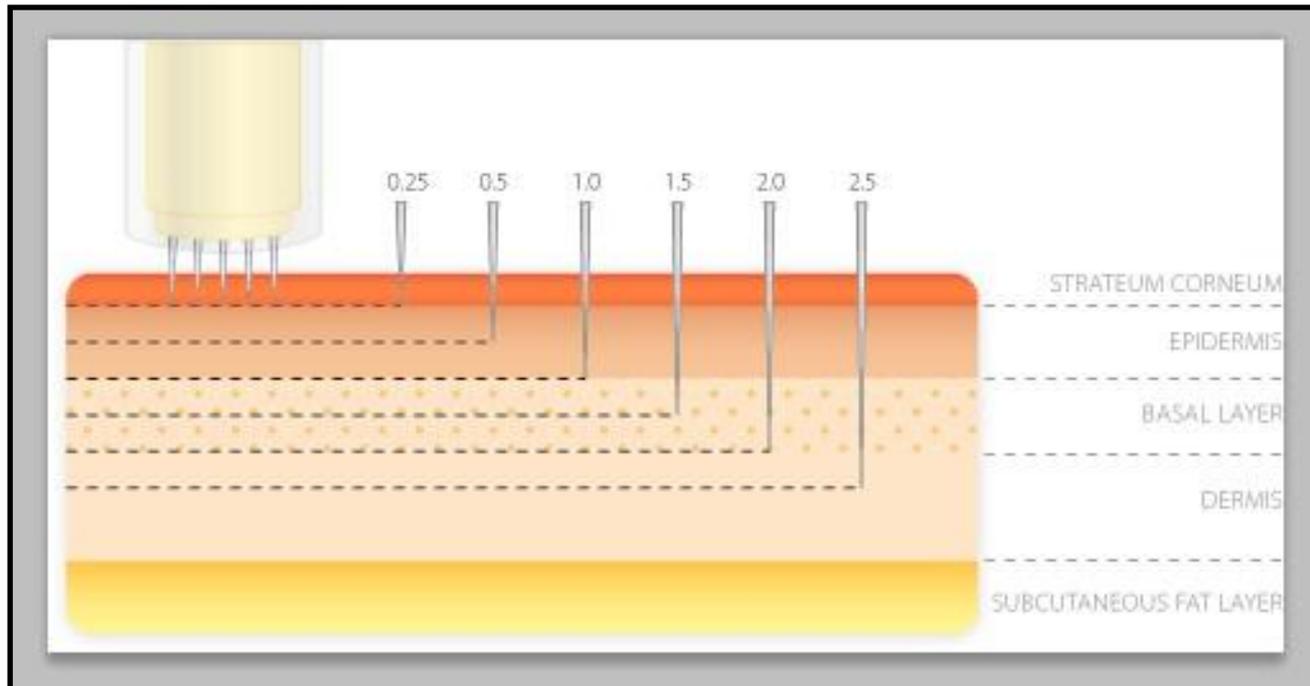
Collagen induction

# The Three Phase Mechanism of Action



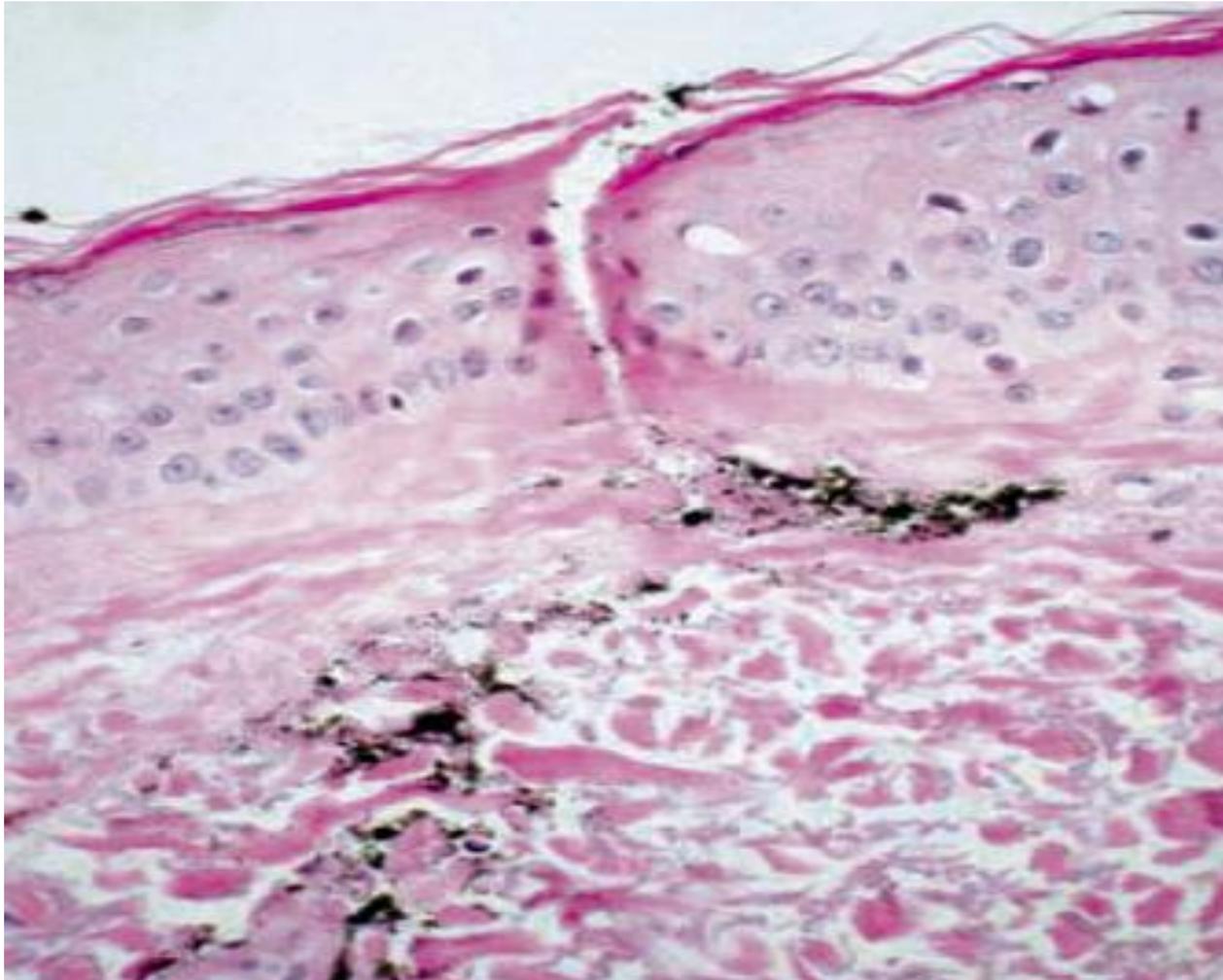
# Micro Needling Depth Chart

Dermapen technology allows unrivaled diversity with a disposable tip that can penetrate from .25mm to 2.5mm during the same treatment



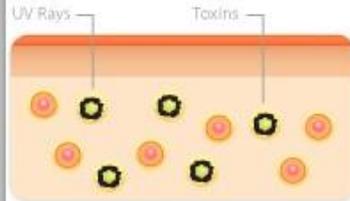
# Micro needling and drug/topical delivery

Micro channels are created for topical absorption



Fernandes D. Oral Maxillofacial Surg Clin N Am 2005;17:51-63. Skin surface coated with Indian ink after needling

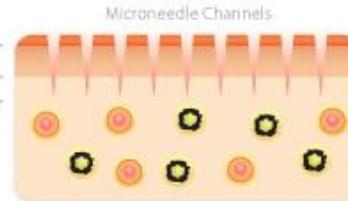
**TRADITIONAL APPLICATION**



Damaged skin condition

VS

**DERMAPEN THERAPY**



The penetration channels through the epidermis layer.



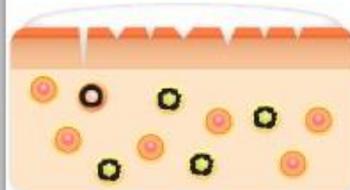
Nucleus With Healthy DNA

CELL MEMBRANE LIPIDS

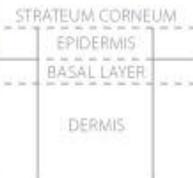


Nucleus With Damaged DNA

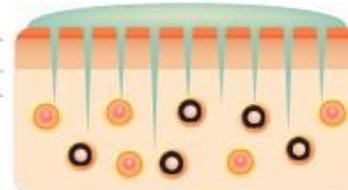
**CONVENTIONAL COSMETICS**



Normal cosmetics only target the surface of the skin. 99% have no effect. Molecules are too big to penetrate.

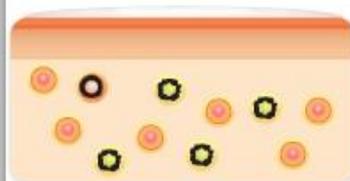


**DERMAPEN TREATMENTS**

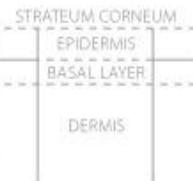


Through the micro channels, the active ingredients with liposome, infiltrate deeper skin layers.

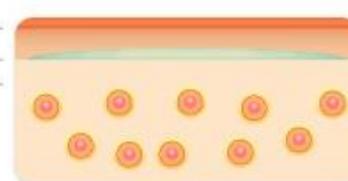
**CONVENTIONAL COSMETICS**



Less than 0.3% effective results

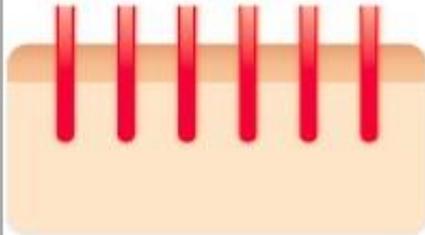


**DERMAPEN TREATMENTS**



The micro channels are closed within minutes and cell membrane and DNA starts to regenerate.

### LASER RE-SURFACING



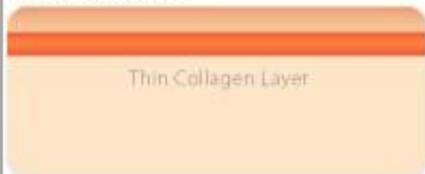
The laser evaporates the epidermis.

Epidermis evaporated with **2ND DEGREE BURN**.



**Risks:** Burns, long healing process, long light sensitivity, pigment problems, possible scarring.

Thin epidermis level.



Duration for healing and formation of a new collagen layer: **About 6 Months**.

VS

### DERMAPEN THERAPY



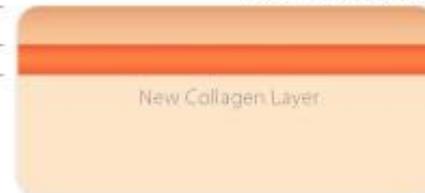
The penetration channels are closed within minutes and hours.

Epidermis preserved and intact.



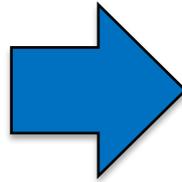
The induced collagen forms a new confluent layer. **Fast healing and minimal risks.**

Epidermis is thickened.



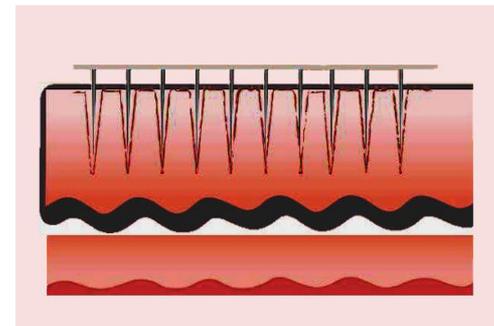
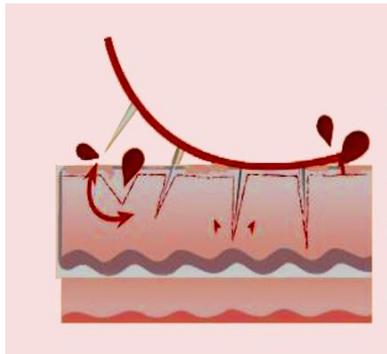
Duration for healing and formation of a new collagen layer: **Maximum 2 Months**.

# Rolling Methods vs. **Dermapen**<sup>®</sup> Therapy



Rolling methods create unnecessary trauma, are user dependent, risk cross-infection, involve high consumable costs, are too large for small areas and display an undesirable perceived value.

Dermapen's automated vertical stamping method uses a universal, sterilized and disposable tip providing low consumable costs. The small tip helps treat hard to reach areas, delivers unrivaled collagen induction with 7 speed variability and reduces epidermal damage to limit down-time.



# How the Patient Looks After Treatment

There is immediate redness that may last 12 to 24 hours



Pre-treatment



Immediately after full face treatment

# Before and After

Keloid scar



Before



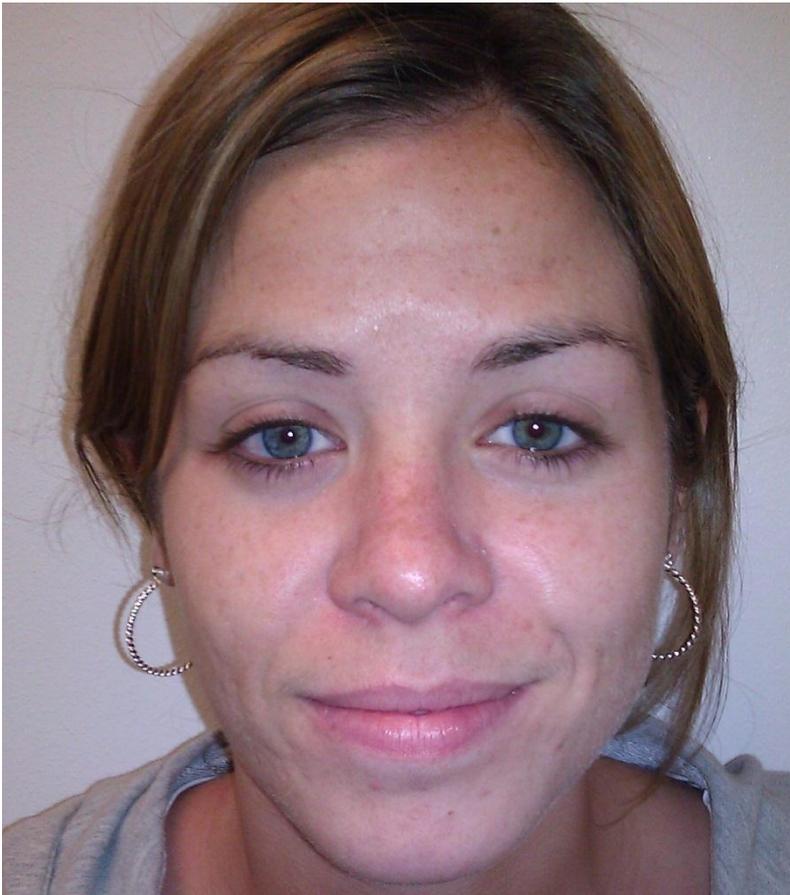
Immediately after



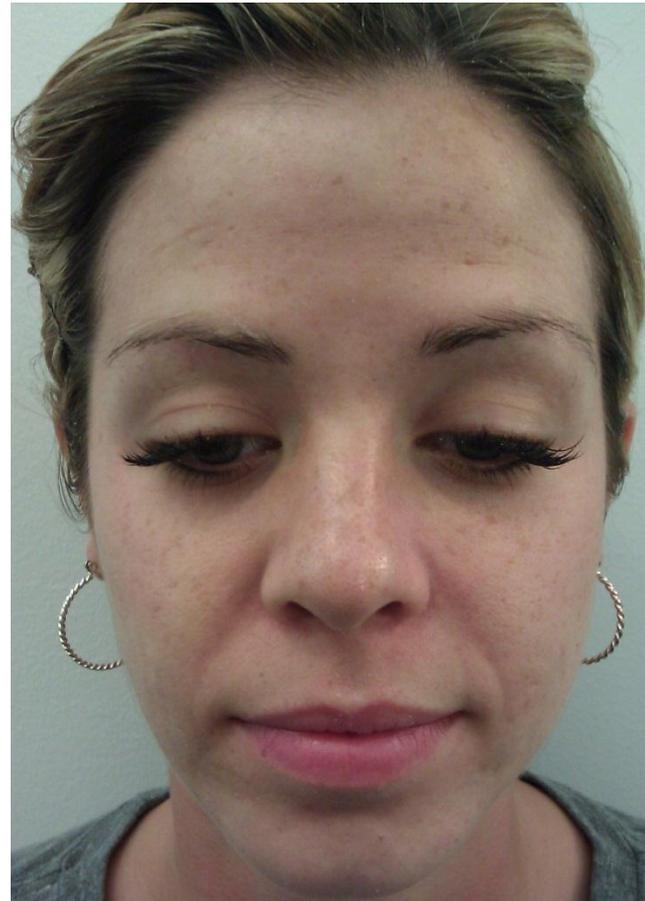
4 Weeks after

# Before and After

Improved skin tone



Before treatment



After 3 treatments 12 weeks, clear and even skin tone

# Before and After

Stretch marks



During first treatment (patient's right side treated, left side untreated)

# Before and After

Dermapen used with other skin tightening lasers  
Improved aging spots, fine lines (under the eyes and mouth) and overall tightening



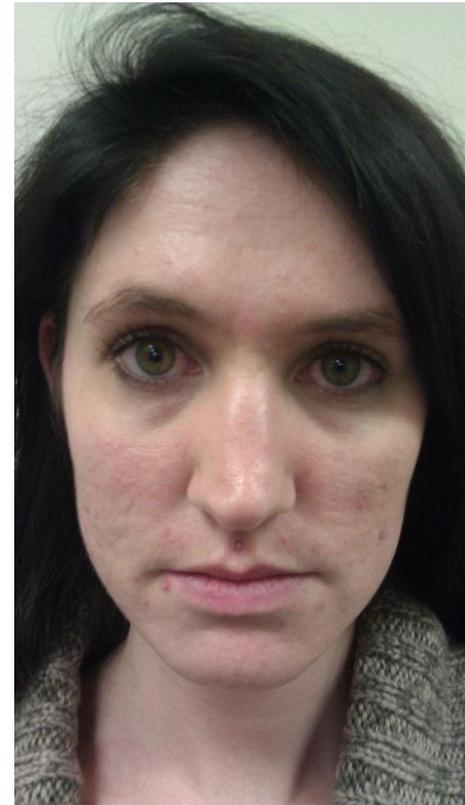
5 weeks after one treatment, YAG and EMAX fractional and Dermapen treatment

# Before and After

Active acne and scarring



Pre-treatment



6 days after first treatment

# Before and After

Improves acne scars



Before



After

( 5 sessions, every 4 weeks. )

# Before and After

Improves acne scars and minimizes pore size



Before



After

( 5 sessions, every 4 weeks.)

# Study On Burn Wound

## Management of hypertrophic scar after burn wound using micro needling procedure

Sang kyo Kim, M. D., Jon mo Park, M. D., Young ho Jang, M. D., Yong hon. Son, M. D.,  
Jib young Bae<sup>1)</sup>, Chang so Lee<sup>2)</sup> · Green burn hospital, Diego

**Purpose:** Hypertrophic scars after burn wound management remains a difficult problem for many burn surgeons despite of new treatment option is developed. Microneedling procedure is new modality on scar management in our burn center. It breaks the scar tissue which consists of dense collagen fibers and rearranges. Microneedling is stamp shaped and it contains 2.1 mm length multiple stainless steel needles.

**Method:** 5 patients(4:adult.1:child) were selected and received micro needling 8 to 12 times every 2 weeks with or without Triamcinolone injection. The scar was passed by the micro needling 3 to 4 times making 200 to 300 holes on the scar area(cm<sup>2</sup>). Skin biopsy was done every 4 times after needling. Two adult patient received micro needling under local anesthesia and other three patients received it under volatile induction anesthesia. Hypertrophic scar is estimated Vancouver Scar Scale (VSS) score and scar depth evaluation using Sonography and pathologic report.

**Result:** Clinically improvement was shown that VSS score were noted and scar height was thinning on Sonography at 4 patients.(3 adult and child). Pathologic report reveal collagen fiber was rearranged and even distributed with regular parallel on all patients.

# Before and After

## Burn Wound



Received micro needling 8 to 12 times every 2 weeks with or without Triamcinolone injection. The scar was passed by the micro needling 3 to 4 times during each treatment and it makes 200 to 300 holes on the scar area( $\text{cm}^2$ ). Skin biopsy was done every 4 times after needling. **Result: Clinically improvement was shown that VSS score were noted and scar height was thinning on Sonography. Pathologic report reveal collagen fiber was rearranged and even distributed.**

# Before and After

Burn wound



Before treatment



Month 2



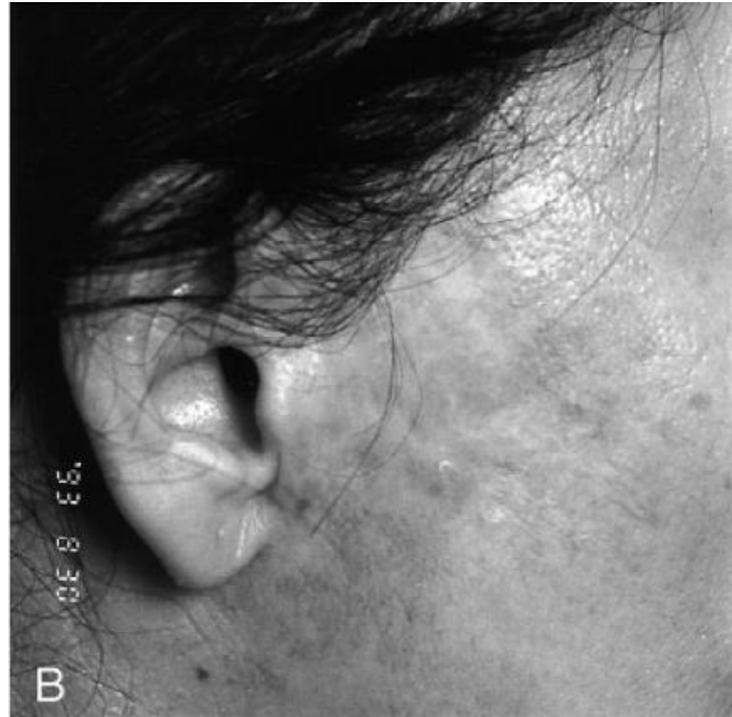
Month 3



Month 4

# Before and After

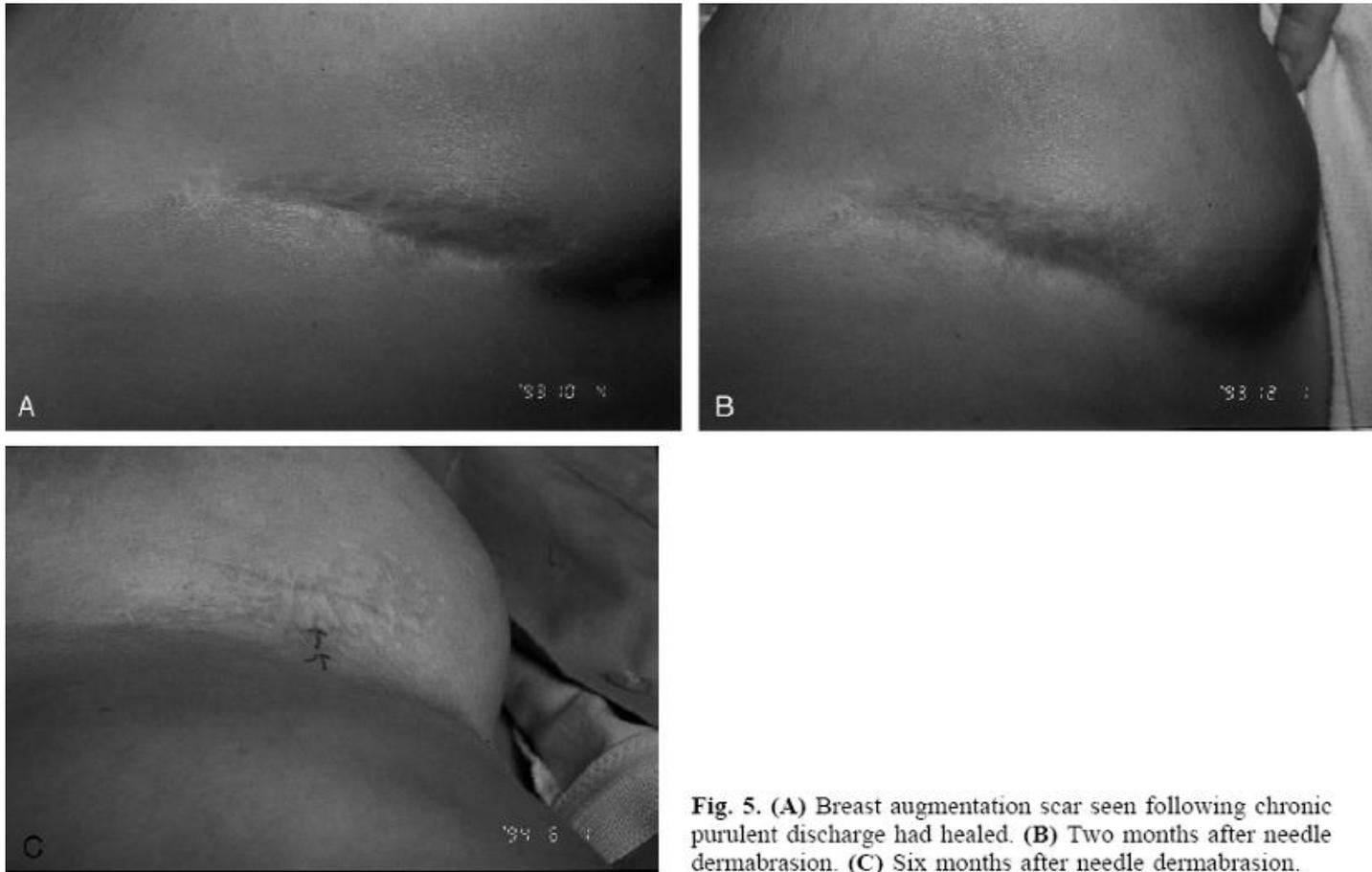
Surgical scar



Camirand and Doucet, Aesthetic Plast Surg 1997;21:48-51 Micro needling Study

# Before and After

## Breast augmentation scar



**Fig. 5.** (A) Breast augmentation scar seen following chronic purulent discharge had healed. (B) Two months after needle dermabrasion. (C) Six months after needle dermabrasion.

# Before and After

## Lip wrinkles



Figure 1. This 57-year-old patient is shown before and 3 months after lip needling.



Figure 2. This 58-year-old patient is shown before and 9 months after two lip-needling treatments.



Figure 3. This 65-year-old patient is shown before and 2 weeks after lip needling.

Results may vary. Treatments at 1.0mm or greater

# Testimonials

## MEDICAL SPA

"I have a specific client, Mallory, that came into our clinic with noticeably deep acne scarring on her cheeks. We tried 3 deep skin resurfacing treatments with the Erbium YAG laser, one deep skin resurfacing with the CO2 laser and multiple treatments of aggressive peels. Those are just the treatments our clinic has performed on her. She has had multiple treatments at other clinics, I am just unaware of details of those treatments. After all of that, she still had noticeable deep scarring. I knew if anyone was going to see any results with the Dermapen, I wanted it to be Mallory.

I was happy she was willing to come in and let me try the treatment on her. After just one treatment she was calling me asking when she could be treated again. After all of the treatments she has done in the past, all it took was one treatment for her to see a difference. It was amazing to me. After 4 treatments, I will say I can still see mild acne scars, but I am confident that with a few more treatments Mallory will continue to be even more satisfied, as will I.

It has been amazing to do a treatment and send a client away not worried about what they are going to look like the next day or when they will call you asking questions if what they are going through is normal or not. Mallory has been so pleased to do the treatment and go back to regular life, no down time, no time off work, no looking scary (all the things we hate to worry about!)

I am excited to start offering the Dermapen to the clients of our clinic and continue to improve the way people feel about the way they look! Thanks, Dermapen!"

Kylene M. - Master Aesthetician and Spa Director

**Employee at Elase Medical Spa** - Salt Lake City, Utah

## COSMETIC DERMATOLOGY

I believe the Dermapen to be an excellent addition to any dermatological or aesthetic medical practice. Micro-needling is an established treatment modality with known benefits. The unique Dermapen automatic micro-needling device adds new versatility with adjustable needling depth, treatment intensity, increased efficiency and the option to focus treatments on troubled areas. The device may also enhance the delivery of medical and cosmeceutical products to a more effective level in the skin. I see the Dermapen as a primary or adjunctive treatment for skin rejuvenation, scars, skin texture, fine wrinkles, and abnormal pigmentation. I also believe the Dermapen will potentially improve the outcome of many of my laser procedures. I have personally experienced the benefits of the Dermapen.

Mark B. Taylor, MD

**Owner of Gateway Aesthetic Institute & Laser Center** - Salt Lake City, Utah

## PLASTIC SURGERY

I had this treatment done last week and it was great!! Very minimal pain and discomfort. My skin felt incredible after, it looked and felt tighter and the tone was noticeably more even all over. I love how, depending on your skin concerns, you can put specific serums on and the Dermapen penetrates the product into different layers of the epidermis and dermis getting the ultimate efficacy of the product. Loved it!! Can't wait for my next treatment!

Amelia M. - Master Aesthetician / Admin

**Employee at Utah Eye and Facial Plastic Surgery**

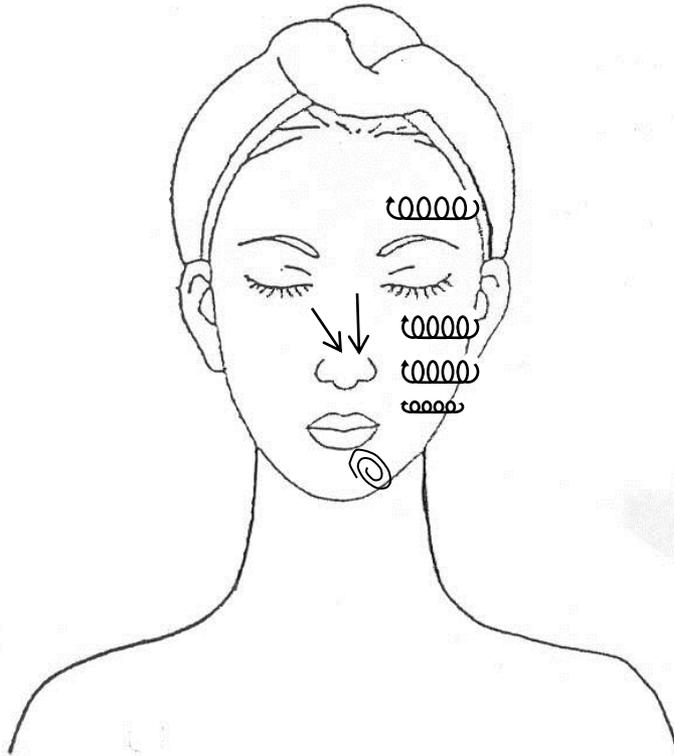
# How to Operate

- Plug in adaptor to the hand piece
- Put sterilized needle into the top of the hand piece
- Choose needle depth  
(Adjust the depth of needle by turning the adjustment ring)
- Turn on speed level ring (Face 1~4, Body 5~7)
- Begin treatment

# Order of Treatment

- Clean face
- Apply numbing cream to treatment area and leave on for 30 minutes
- Remove numbing cream thoroughly
- Apply antiseptic wipe to treatment area
- Apply hyaluron product to treatment area
- Begin treatment

# Treatment



1. Divide the face into five parts:  
forehead, left and right cheeks, nose, upper lip and chin
2. Apply hyaluronic/topical on the area to be treated
3. Make three passes to each area – vertical,  
horizontal and small circles
4. After treating each section, wipe any bleeding
5. Treat the other areas as described above,  
steps 2 through 4
6. After the entire face is treated, cover with a  
cooling mask if desired

# Dermapen®

## Speed

- Level 1. : 25~30Time/ sec
- Level 2. : 35~40Time/ sec
- Level 3. : 45~50Time/ sec
- Level 4. : 55~60Time/ sec
- Level 5. : 65~70Time/ sec
- Level 6. : 75~80Time/ sec
- Level 7. : 85~90Time/ sec

DEPTH	SPEED
under 0.5mm	1 ~ 2
0.5 - 0.75mm	2 ~ 3
0.75 - 1.25mm	3 ~4
1.25 - 1.5mm	4 ~ 5
1.5 - 2.5mm	6 ~ 7

## Depth

REGION	THIN SKIN	THICK SKIN
Forehead	0.25 - 0.5mm	0.5 – 0.75mm
Between Eyebrow	0.25 - 0.5mm	0.5 – 1.0mm
Nose	0.25mm	0.5mm
Eye Area	0.25mm	0.25 – 0.5mm
Cheek Bone	0.5mm	0.5 – 1.0mm
Cheek and Chin	0.5 – 1.0mm	1.0 - 2.0mm
Upper Lip	0.25mm	0.25 – 0.75mm
Facial Scarring	1.0 - 1.25mm	1.5 – 2.0mm
Stretch Mark	1.5 - 2.0mm	1.5 - 2.0mm
Surgical & Burn Scars	2.0 – 2.5mm	

# Dermapen<sup>®</sup>

## Fractional Micro Needle System



Starter Kit



Hand-piece

# HA-BOOST and Consumables



Hyaluron/B5 GEL



Needles (30PCS/Box)

HA-BOOST prevents the appearance of aging and the look of fine lines and wrinkles by hydrating and stimulating collagen and elastin formation.

# Specifications

<b>Name</b>	<b>Dermapen</b>
<b>Function</b>	<b>FRACTIONAL MICRO NEEDLING DEVICE</b>
<b>Input power</b>	5V=1000mA, 12VA
<b>Adapter</b>	AC100~240V, 50-60Hz
<b>Dimensions</b>	Hand piece 20*20*140 (mm)
<b>Weight</b>	Total /555g, Hand piece/82g
<b>Depth</b>	0.25, 0.5, 1.0, 1.5, 2.0, 2.5(mm)