



i-THREAD

Make it perfect your skin

WHAT IS I-THREAD ?

- ❑ Catgut embedding therapy
- ❑ **Treatment through Injecting POLYDIOXANONE SUTURES (PDS SUTURES) into skin via syringe**
- ❑ Using PDS sutures as skin and body treatment
- ❑ Inserting thin suture to prolong the stimulation time -> Prolonging the stimulation time will increase the treatment effect

THE HISTORY OF CATGUT

Catgut usage dates back to about 2000 B.C., in Egypt and Syria; Hippocrates also mentioned about catgut in his records.

Initially catgut was manufactured from lamb skin and intestines.

There is also a record of catgut being used in ancient China. This record indicates that ancient Chinese used a thin thread soaked in a medicinal agent inserting to a pressure point.

First usage in modernday medical field dates to 1970 China in treatment of epilepsy patients. Now it is used not only in medical, as well as in aesthetic, but reaching as far as treatment of pain reducing process.

WHAT IS POLYDIOXANONE SUTURES (PDS SUTURES) ?

- ❑ **DURACRYL [PDS SUTURES]** is sterile monofilament **Synthetic Absorbable Suture** composed of the polyester, poly (p-dioxanone). Polydioxanone suture provides wound support for longer period as compared to other synthetic absorbable sutures. Polydioxanone suture also offers far superior tensile strength.
- ❑ **POLYDIOXANONE SUTURES**
- ❑ Polydioxanone suture is made from polymerizing para dioxanone monomer. PDS sutures provide wound support for longer periods up to 50 days and offers far superior tensile strength and outstanding pliability.
- ❑ Its monofilament structure provides good handling properties and excellent knot security. Absorption of suture is by simple hydrolysis within 180 days from implantation day. Absorption of polydioxanone suture is reliable and predictable.

i-Thread Characteristics

1. No need for general anesthesia and incision meaning, no bleeding or swelling allowing the patient for immediate return to day to day life.
2. Catgut inserted during procedure slowly melts and gets completely absorbed allowing absence of discomfort and side effect
3. The procedure is a simple process not requiring special equipments, allowing relatively low treatment cost.
4. The treatment of the catgut therapy is performed once in 1~2 weeks. Convenient and continued effect is achieved allowing progress in chronic disorder.
5. Greater effect is achieved from stimulating countless pressure point in a human body.
6. Along with the effect of acupuncture, the treatment controls the contraction of the skin fascia and ligament tissue. This unique contraction control creates orthotherapy effect from supplementing cell, muscle, bone and joint.

MAKE IT V-LINE WITH I-THREAD



ADVANTAGES OF I-THREAD

1. Sagging of dermis due to aging is naturally and quickly improved.

Fast natural improvement is achieved from effective lifting

2. **Formation of collagen in the dermis is induced, increasing firmness of the skin.**

Inserted suture will disintegrate over period of 2~3 months. This will induce formation of collagen agent in the skin cell resulting in increased firmness.

3. Creating and maintaining lighter and smoother skin tone.

The suture that is inserted acts as if you are getting acupuncture therapy every day, resulting in blood circulation of the facial muscle and skin, enhancing skin tone and maintaining smoother skin.

4. Less sagging of cheek and chin line .

Sagging skin around mouth area is tightened and firm definition of the chin area is enhanced.

i-THREAD Catgut Type

Gage	Length	Application
26G	9cm	Correct face and body, fat reduction on small area
29G	6cm	Pain reducer, face lifting
29G	4cm	Facelift, Nasolabial folds, Frown lines, correction breast line
30G	3cm	Wrinkles in eye area, Hair loss
	4cm	Facelift, , Nasolabial folds, Frown lines
29G (gold plated suture)	4cm	Facelift, , Nasolabial folds, Frown lines (increased duration of effect)

Evolution of Catgut

Development	Material	Pro	Con
1'st Generation	Catgut (Plan and Chromic)	Natural Substances	Great rejection rate
2'nd Generation	PGA (Polyglycolide)	First synthetic substance, natural absorbent , outstanding flexibility	Possibility of infection Rough surface
3'rd Generation	PDO (Polydioxanone)	Virtually infection free Smooth surface Simple manufacturing process	Less flexible compare to multifilament
4'th Generation	Copolymer	Possibility of production under specific usage	

PDO (Poldioxanone) : First introduced in 70s' as a stitching fiber. First ever monofilament product. The absorption rate is of the highest among the absorbable suture.

Mass absorption : 180 ~ 240days

PDO Suture 멸균과 보관

Suitable and unsuitable loads for different types of sterilizer

<i>Type of sterilizer</i>	<i>Suitable loads</i>	<i>Unsuitable loads</i>
Porous load (high-temperature steam)	Porous items; items with narrow lumens that trap air and inhibit the penetration of steam. Examples : any item with porous wrapping, dressings, clothing, towels	Items which would be damaged by exposure to steam at 121-137 °C
Dry heat	Items which would not be sterilize by high-temperature steam, or would be damaged by doing so. Examples: solids, powders, non-aqueous fluids, ointments, ophthalmic instruments	Aqueous fluids and items which would be damaged by prolonged exposure to dry heat at 160-220 °C
EO (Ethylene Oxide)	Wrapped or unwrapped items which would not be sterilized by steam or dry heat or would be damaged by doing so.	

All application other than lifting should be performed in 2weeks interval.
Lifting should be performed in 4 weeks interval. Basic Tx is 3~5.

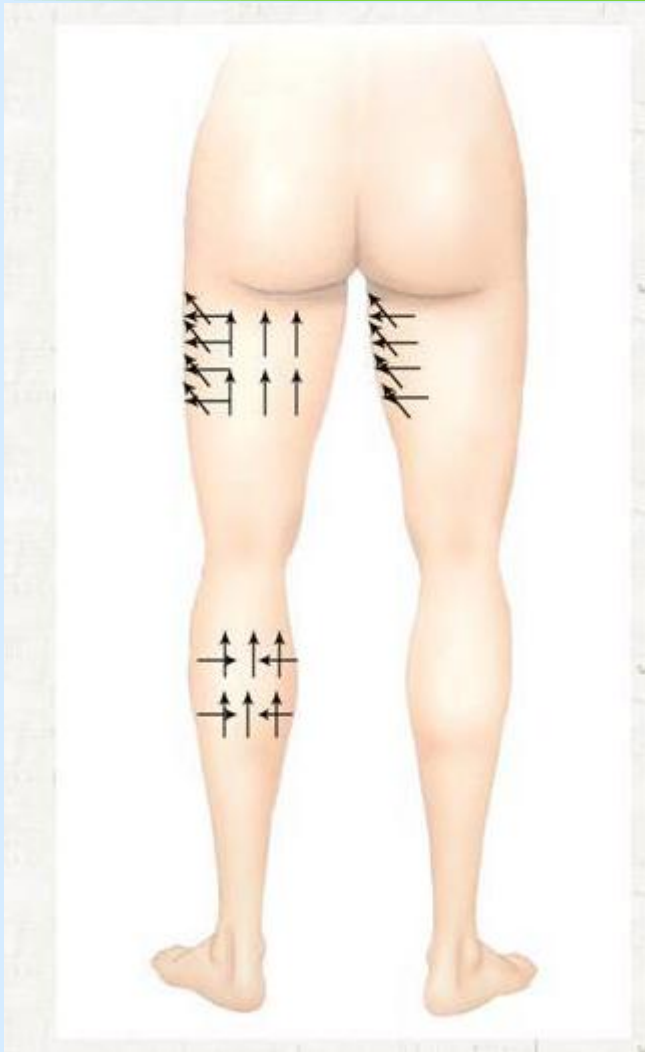
Treatment Area	Gage	length	One side	Both side	Interval	# of treatment
Worry lines	29	4		14		
Eye area wrinkles	29	4		14		
Frown lines	29	4	7	5~10		
Nasolabial folds	29	4		20	2weeks	5~10 Tx
Vertical lip lines	29	4				
Lifting	29	4,6		50~100	2~4weeks	3~5 Tx
Breast Enlargement	29	4,6	20~30		1~2weeks	10~14 Tx
Abdominal obesity(front)	27,26	6		20		
Abdominal obesity(side)	27	6	10	20	2weeks	5 Tx
Hip	27	6		50~100		
Thighs/Claves	27	6				

20~30 suture for front abdomen, for entire abdomen area, use about 100 suture.
For hip-lift, insert according to muscle structure.
About 40~60 suture for the thighs.

WEIGHT LOSS

- ✖ Insertion to the fat layer will stimulate the fat cell and dissipate it. This stimulation process will last for 7~15 days and continued results can be expected.
- ✖ By utilizing the 경피침주요법, highly effective for disintegration of the fat cell, insertion of fat dissapating agent will safe and fast weight loss will be achieved.

Tights /Claves Obesity



Tights

Combined with high- frequency massage and Carboxy therapy, result is highly effective.

Femoral

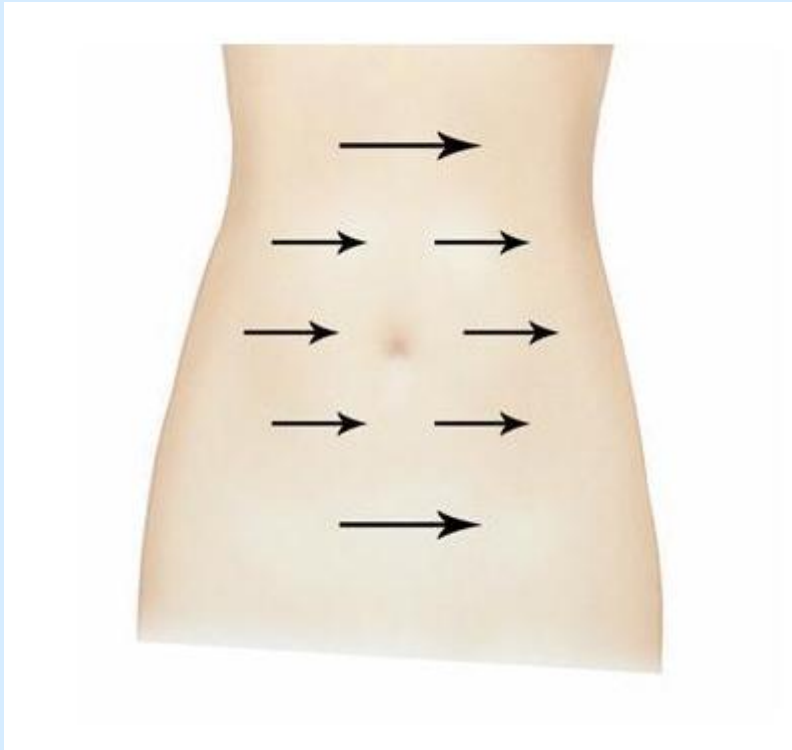
Treatment of gluteus maximus, Musculus gluteus medius, 소둔근, Piriform muscle, great adductor muscle, pectineal muscle, 폐쇄근, femoral muscle and 막장근

Claves

Dealing with Claves, treat in horizontal direction.

Much pain and the results appear slowly

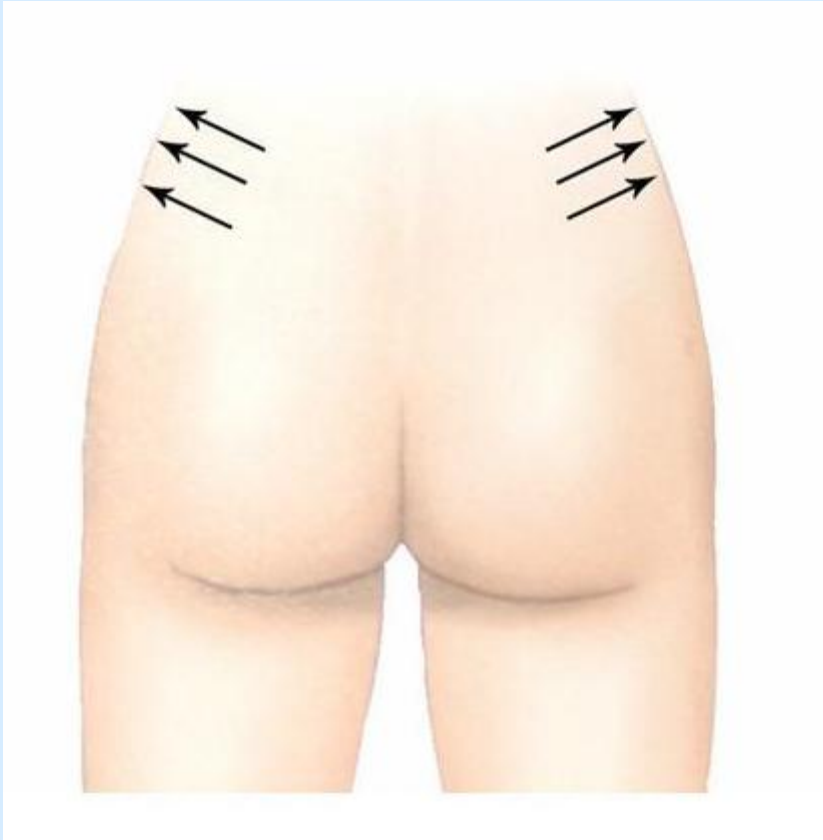
Abdominal Obesity



Inject roughly 30 of 27G
6cm and 26G 9cm sutures

Achieve increased
efficiency with
High-frequency message

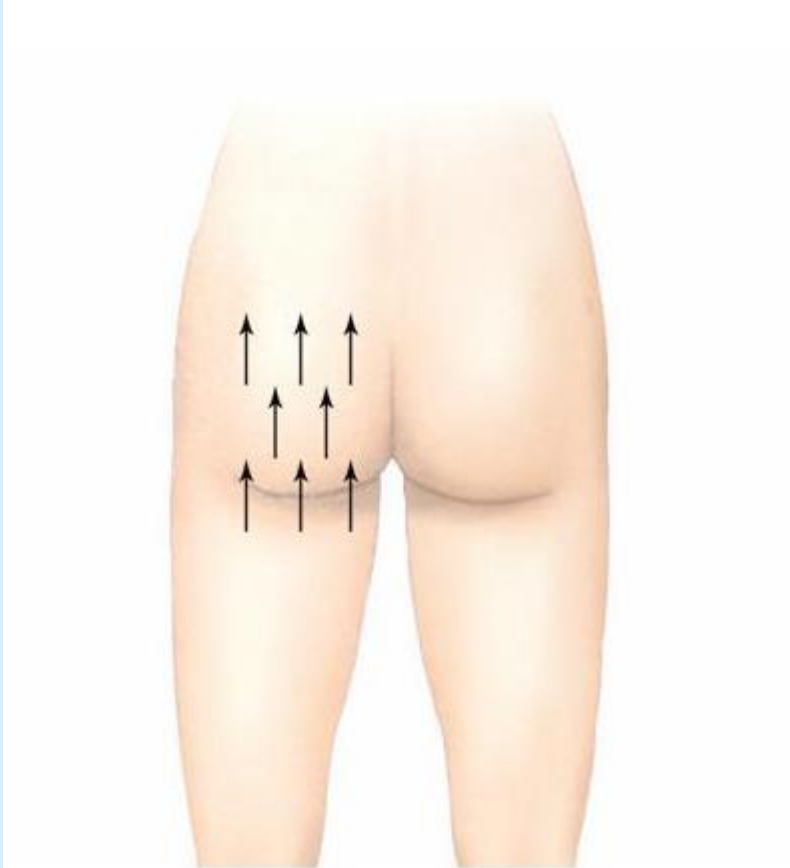
Love handle(Sides)



Inject 10 sutures each side
with 27G 6cm, total 20 of
threads

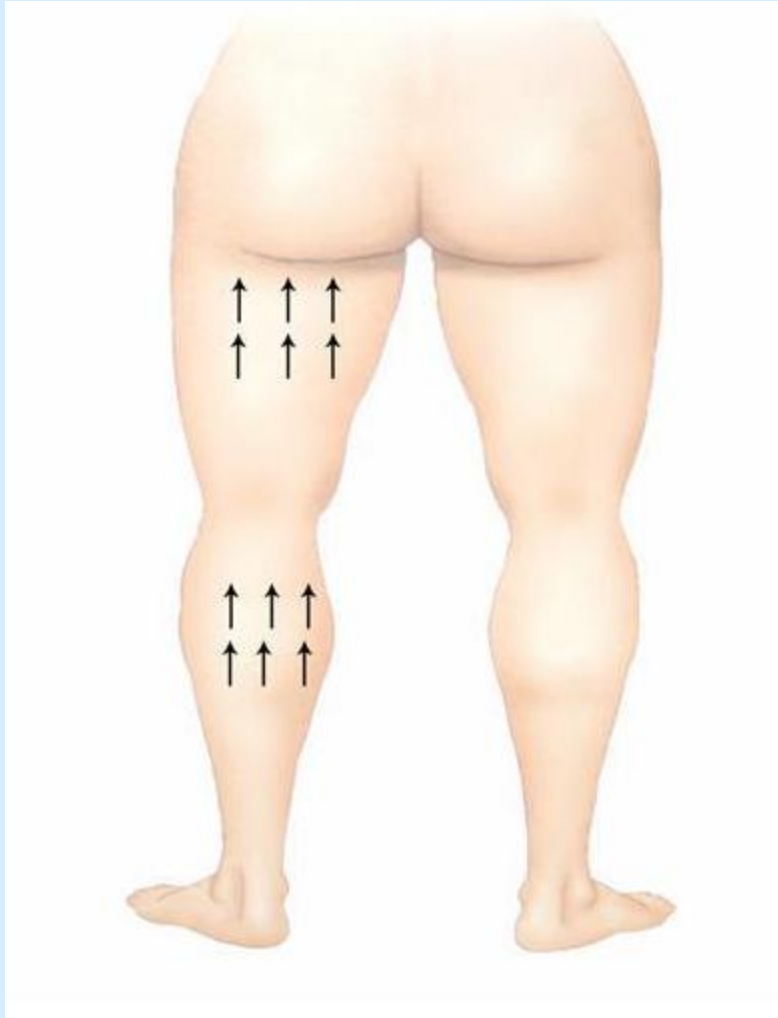
Perform treatment in 30
degree upward angle

Hip-up



Inject multiple threads
According to patient's
Muscle structure
(About 50~100 each sides)

Tights and clothes obesity



Armpit



Perform treatment on protruding area.
Highly effective.
Treatment instruction is same for both front and back.

Treatment of detoid and trapezius

Upper Arm

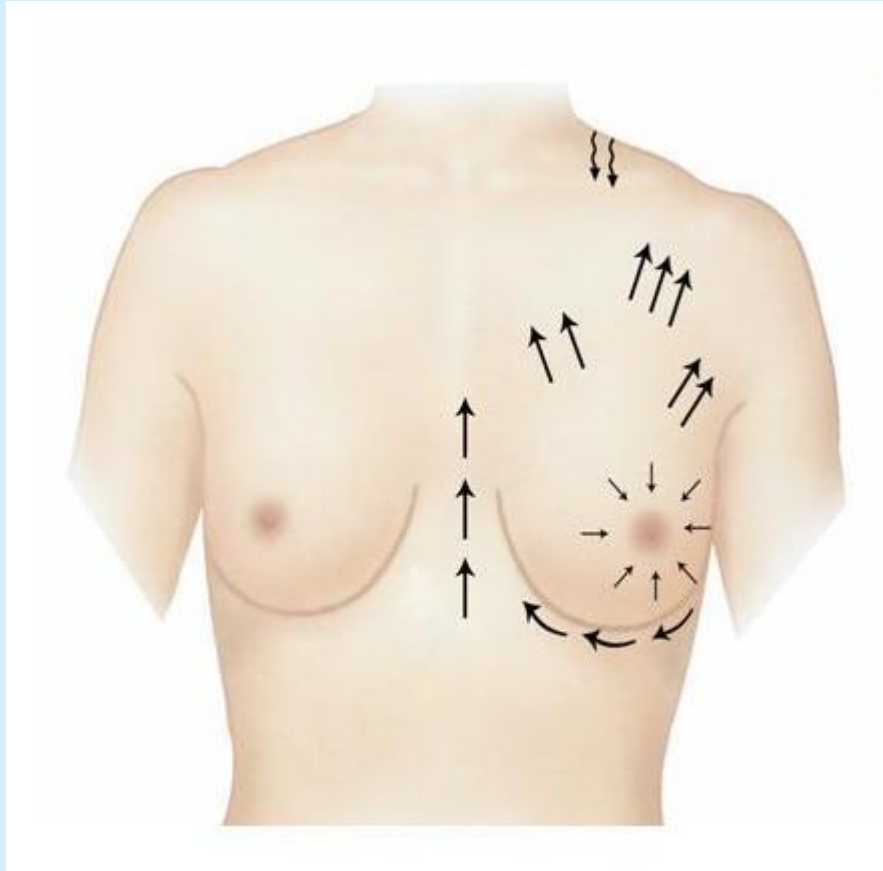


Check for the area sagging the most in upper arm when stretched out. Insert suture in that location. Also insert upper and lower area of the section.

Treat dermis or panniculus carnosus

Treatment of sagging arm and – latissimus dorsi muscle

Breast Enlargement



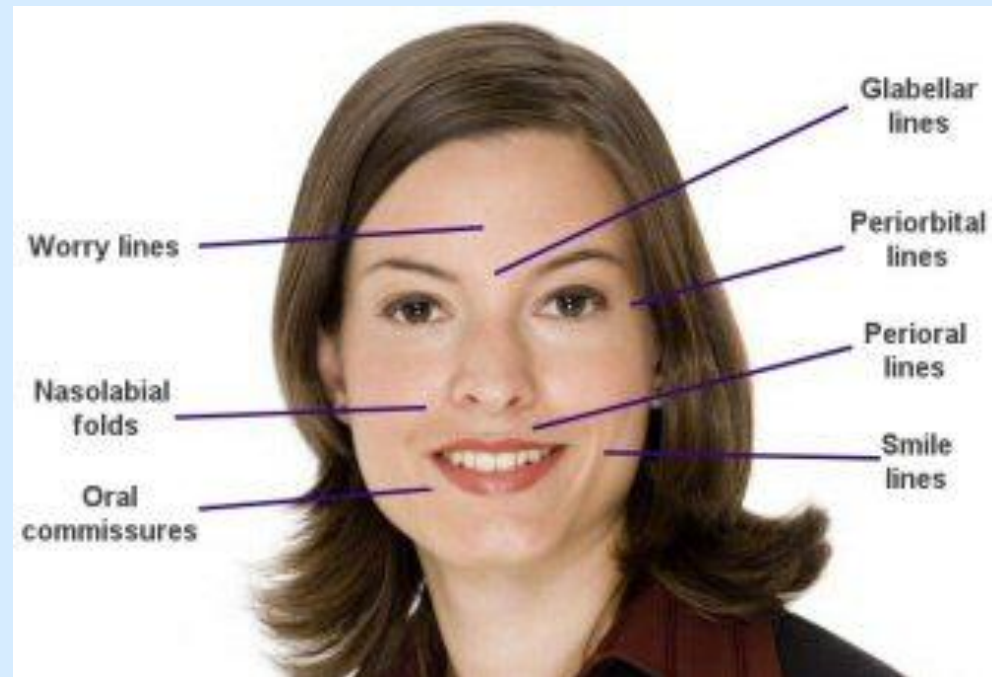
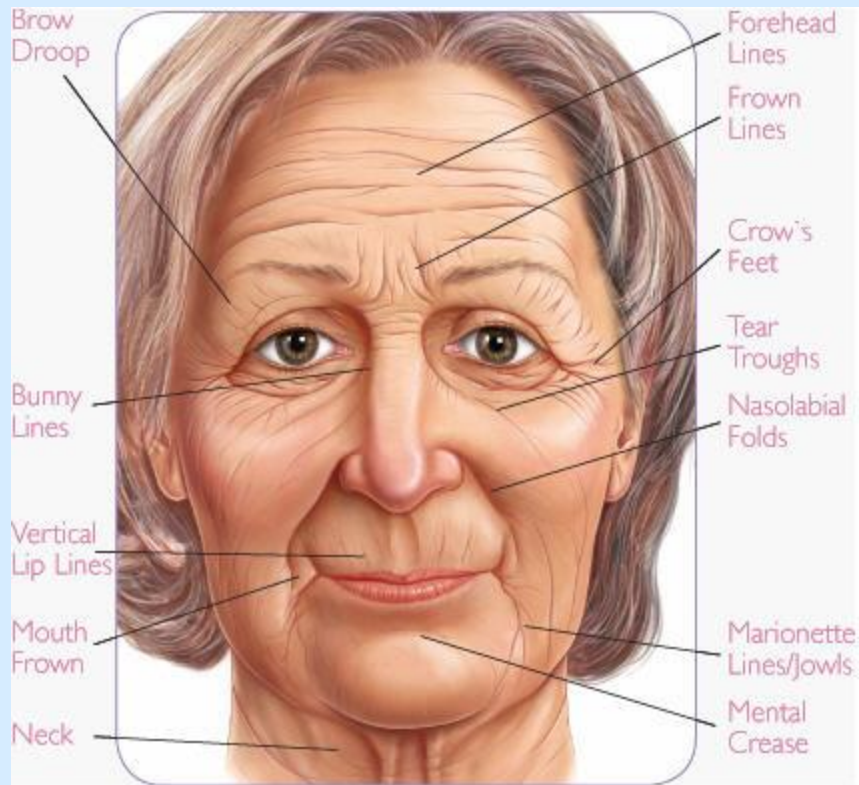
Inject the suture in direction towards nipple and massage the breast more than twice a day. Encouraged to drink milk or soy milk more than 3 times a day

Use 29G or 27G

Strengthening pectoral muscle is recommended

If the patient has a round shoulder, combining 태반약침 is highly effective

WRINKLES



PRE-OPERATION CARE

- ◆ Patient should **not smoke or drink alcohol** for at least two hours before treatment and for at least two hours after treatment. It is preferential that the patient should avoid smoking completely during the day of treatment. The patient should understand that smokers would achieve reduced results.
- ◆ If possible patient should **avoid aspirin, non-steroidal anti-inflammatory drugs** and antihistamines for at least seven days pre- and post-treatment.
- ◆ Patient should **avoid undergoing strenuous exercise** for at least two hours pre- and post-treatment.
- ◆ Patient should **avoid the use of Aloe Vera preparations**, due to their strong anti-inflammatory properties.
- ◆ For with type III skin or greater **apply** tretinoin 4% hydroxyquinone twice daily for 2 to 6 weeks before Tx or **apply** melanocytic cytotoxic agent for weeks before Tx.

Pre-Tx: Consultation (I)

◆ Step 1. Consultation

The patient should have the following explained to them:

There have been no reported incidences of side effects other than a slight redness that can last a few hours.

- ✓ · **How the treatment works.**
- ✓ · **Number of treatments** required to reach their particular treatment goal and the cost of treatment.
- ✓ · **The length of time** before a result is noticed.

◆ If the client decides to proceed with treatment they should read and sign the **Client Declaration Form** to confirm that they understand all the implications of treatment.

◆ **Verbal or written confirmation** should be made by the client prior to each individual treatment session.

PRE-TX: CONSULTATION (II)

- ◆ **Thorough examination of the skin** to be treated should be performed, carefully noting scarring, dyschromia, rhytid formation, and skin type.
- ◆ For patients **desiring periorbital laser treatment**, a careful examination of the eyes for scleral show, lid lag, and ectropion should be performed.
- ◆ Other **cutaneous disorders** should also be investigated, including seboreic keratosis, solar lentigines, actinic keratosis, acne vulgaris, and cutaneous carcinomas.

The latter should be treated prior to any resurfacing procedures.

- ◆ With this information, the benefits of laser resurfacing must be assessed, along with its limitations, risks, and benefits. Perhaps most important, **one must be certain that the patient has realistic expectations and sound reasons for deciding to undergo the cosmetic laser surgical procedure.** Other cosmetic surgery treatments should be reviewed so that the patient may make an informed decision

Pre-Tx: Preparing the Skin

◆ Step 2. Cleansing the skin

- ✓ Use alcohol to remove excess sebum from the surface of the skin after cleansing. This allows topical anesthetic to be more efficiently absorbed.

◆ Step 3. Applying Topical Anesthetic

Apply a topical anesthetic on the skin surface .

- ✓ wait a 40 to 60 minutes for the anesthetic
- ✓ ointment may help the skin to efficiently absorb, film covered dressing must be applied on the skin to help the skin to more efficiently absorbed (Occlusion Effect)

◆ Step 4. Removal of Topical Anesthetic

After 40-60 minutes, wipe off the topical anesthetic thoroughly.

If topical anesthetic is not completely removed, the result might be unsatisfactory outcome

CONTRAINDICATIONS (I)

- ◆ Are **pregnant**.
- ◆ Are prone to **keloid scarring**
- ◆ Have a history of **poor wound healing** (fresh, open wound).
- ◆ Are taking **anti-seizure medication**.
- ◆ Have exposed the treatment site to UV within four weeks prior to treatment.
- ◆ **Herpes Simplex** in any area of the skin within the last 31 days
- ◆ **Psycho-Neurotic**
- ◆ **Non-compliance** (Patients who are unwilling to follow the post-treatment instruction).
- ◆ **Unrealistic expectations**.

CONTRAINDICATIONS (II)

Absolute contraindications

isotretinoin use within the previous 6 months, active cutaneous bacterial or viral infection in the area to be treated, and ectropion (for infraorbital resurfacing).

Relative contraindications

Patient history of keloid formation or hypertrophic scarring, ongoing ultraviolet exposure, prior radiation therapy to treatment area, and collagen vascular disease

CAUTION TO PATIENTS

- ◆ **Caution should be taken** with patients who smoke or who have a history of previous laser resurfacing, phenol chemical peel, dermabrasion, and/or transcutaneous lower blepharoplasty.
- ◆ Also, patients planning to undergo neck or extremity laser resurfacing should be forewarned of the **increased risk of fibrosis** in these areas
- ◆ It is important during initial part of recovery that patients **keep his/her skin moisturized**.
- ◆ **Good postoperative care of patients** is essential to enhance the healing progress and prevent complications

IDEAL PATIENT SELECTION

- ❖ **Light Skin Phototypes (I-II)**
- ❖ **Non-dynamic rhytides (perioral, check, periorbital)**
- ❖ **Atrophic facial scars**
- ❖ **impurities and skin blemishes**
- ❖ **Epidermal lesions**
- ❖ **Large pores**

POST-CARE PROCEDURE

**Immediate
after**

Apply a cool pack

Apply an occlusive ointment (Vaseline)

**Post
1-2 days**

Apply a cool pack

**Soaking & gentle cleaning
with gauze compress**

**Post
7days**

Apply sun block cream and make-up

WHAT CAN BE EXPECTED FROM I-THREAD ?

**Immediate
after**

Erythema, Edema

**Post
1-2 days**

Swelling, Redness, Crusting

**Post
5-7 days**

**Exclusion of the crusting layer
(Regenerated pinkness skin)**

**Up to
1 years**

**Continual collagen synthesis
& remodeling**

AFTER CARE FOLLOWING I-THREAD

- ◆ 1. Following the procedure the patient will be asked to remain for 15 minutes to insure that the procedure was tolerated well.
- ◆ 2. Ice should be applied to the area of injection for about 20 minutes, 3 times per day for the next 48 hours.
- ◆ 3. DO NOT TAKE anti- inflammatory medications for the next two weeks.
- ◆ 4. Pain can make the patient fairly uncomfortable. Pain pills are prescribed for this purpose (no driving while taking narcotic medication!!). It usually resolves in the first few days.
- ◆ 5. Use of a brace or sling is mandatory and not for comfort only. It is to be used at all times except when showering or dressing.
- ◆ 6. After 2-3 days, normal activities are allowed. This would include going to work, driving, errands, school, etc.
- ◆ 7. A follow up post procedure exam will be scheduled for about 2 weeks.
- ◆ 8. Exercise sheets for stretches will be given.

How do we inject i-THREAD into the skin?



- ✕ Now we are injecting the i-THREAD using “mesotherapy” like technique over the entire area to be treated.
- ✕ Inject 4cm or 6cm depending area into the skin.
- ✕ Injecting layer is dermis and subcutaneous tissue.

DESIGN THE AREAS



INJECTION THE I THREAD



AFTER TX

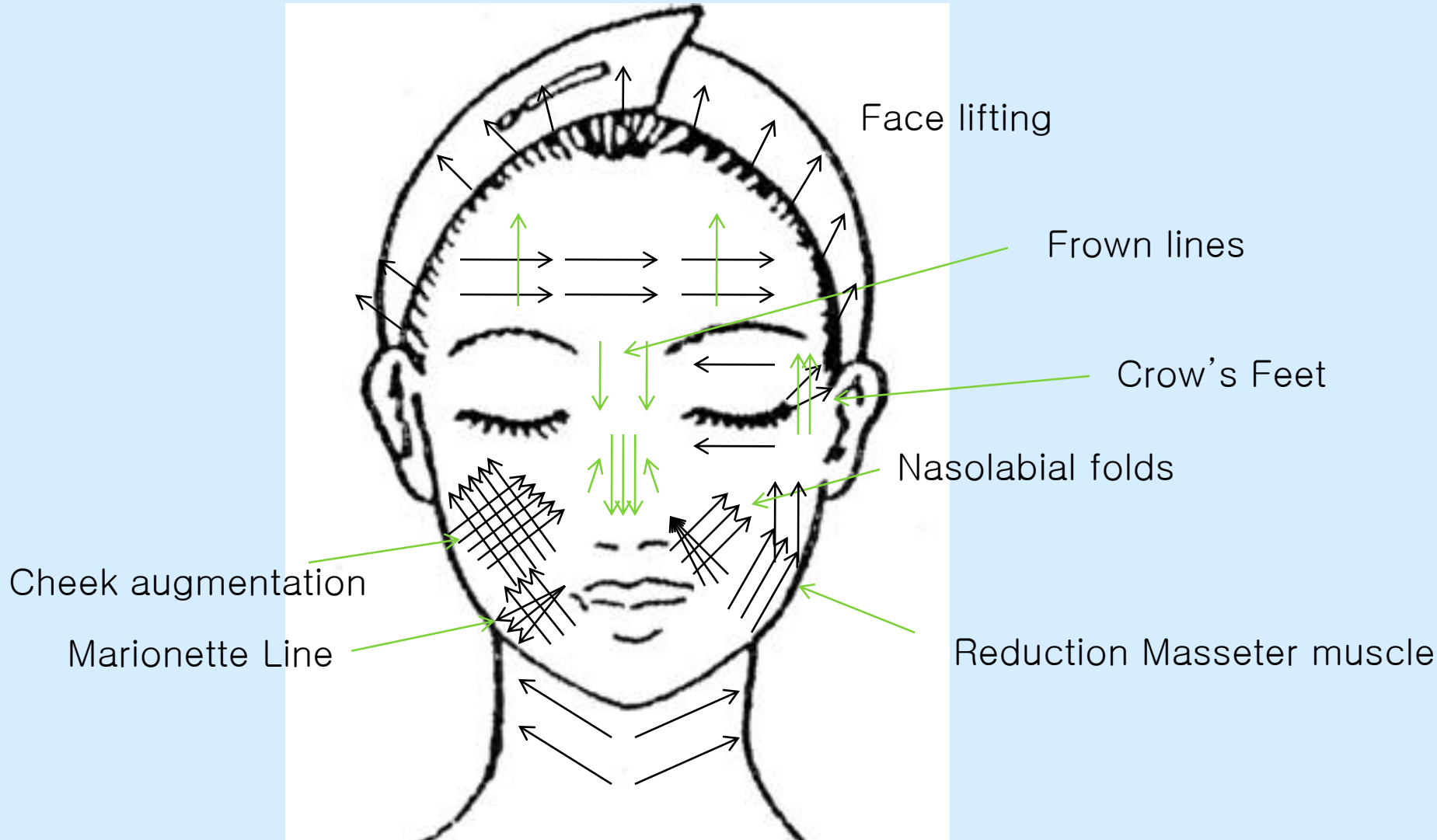


Before



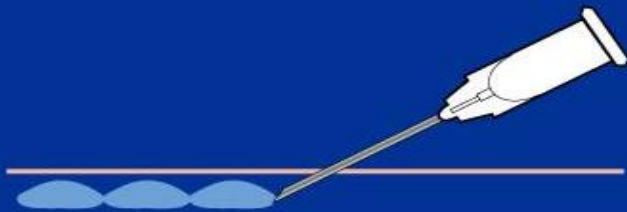
After

TREATMENT ON FACE



Injection Techniques

Serial puncture technique



Linear threading technique

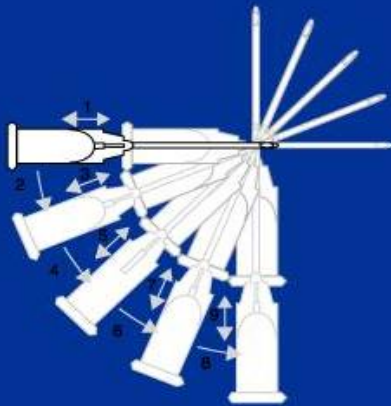


- Recommended for wrinkles and folds

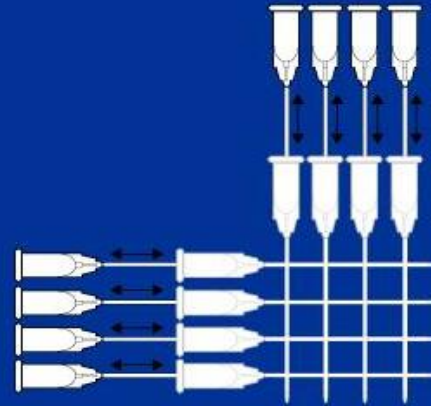
NB: Preferred technique: Linear threading with 26g needle for eyelids and 29g needle for the rest

INJECTION TECHNIQUES

Fan technique



Cross hatching technique



- Recommended for shaping facial contours

NB: Inject with up to 50% over-correction!

Wrinkles which can be improved by
i-THREAD®

- × **Around eyes**
- × **Nasolabials**
- × **Foreheads**
- × **Glabella**
- × **lips**
- × **Neck**
- × **Hands**
- × **Acne**

Wrinkles that can not be operated or fillers injected such as wrinkles under the eyes can be treated effectively

Certain improvement for skin sagging can be expected by i-THREAD.

Oral wrinkles



Take extra caution.

This area is extremely sensitive to pain.

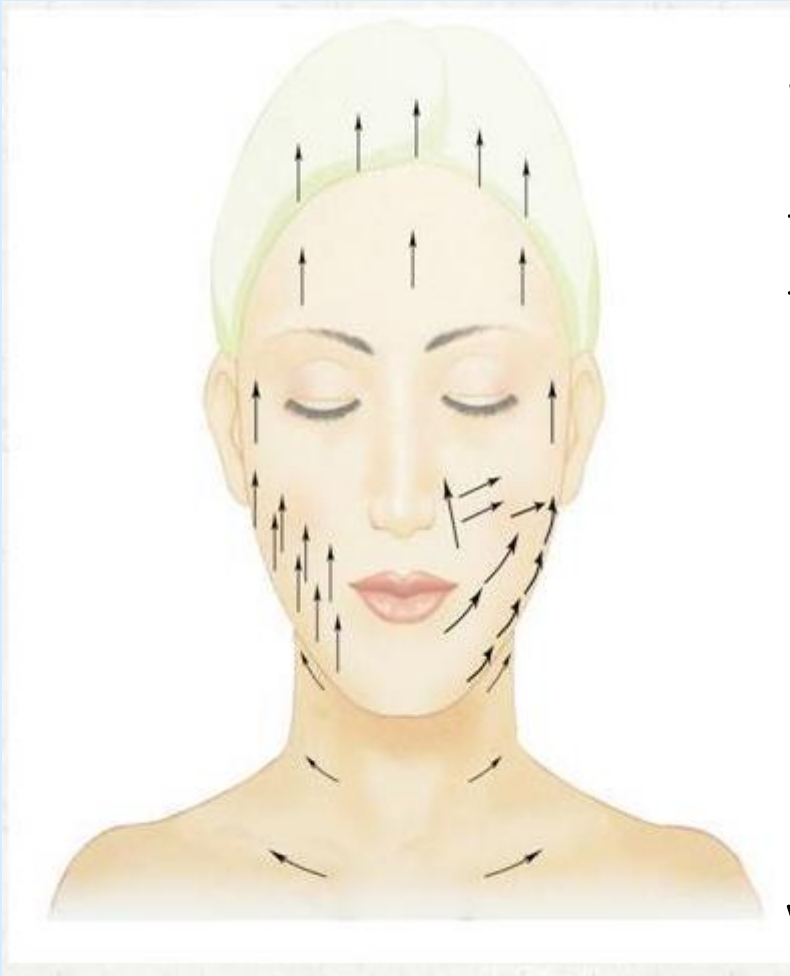
Use 29G 4cm



FRONT FACE LIFTING



Face lifting



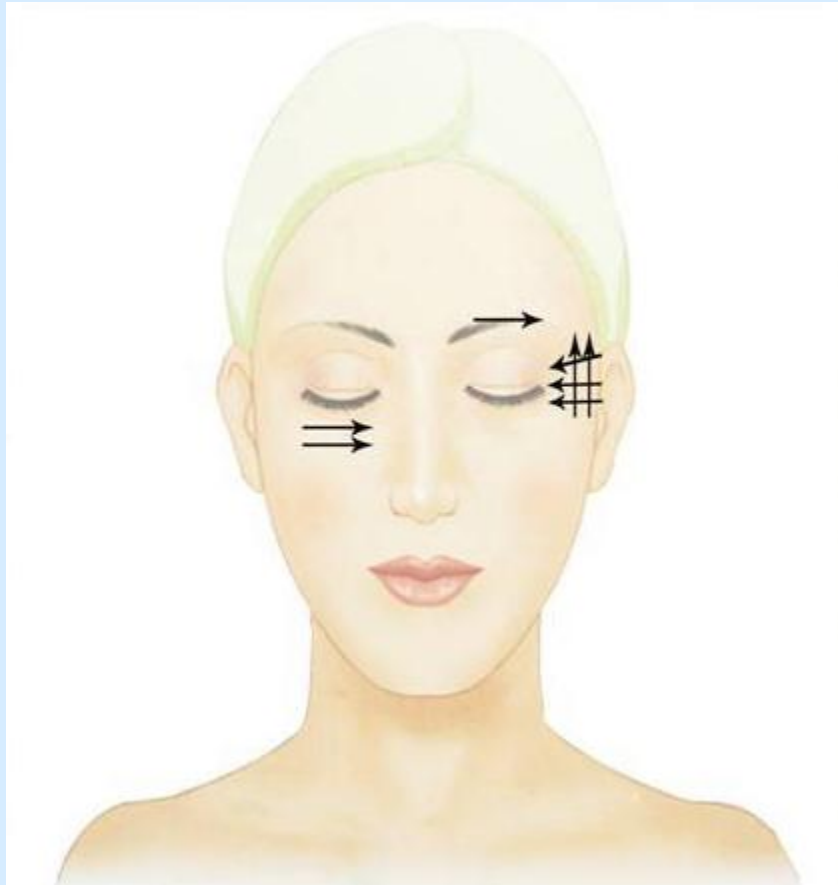
Inject i-thread upward on sagging area of the cheek and multiple injection is allowed due to the area being less sensitive to pain.

Injecting along the jaw line will increase the visual definition of it.

Inject 50 ~ 100 i-threads
For lifting, 1 treatment per 2~4 weeks in 3~5 sessions duration.

After treatment, apply soothing cream.

Crow's feet and Tear Troughs



Crow's feet

Treat wrinkle boosts feeling

(subcision is a great method but bruise might occur)

Perform from downward to upward. (Easy to bruise and Bleeding)

Using i-thread 29G 4cm

Tear Troughs

Perform from outside to inside under the eye

(Easy to get a bruise and Bleeding)

Treat with the feeling like drawing wrinkles

Greater effect is achieved when combined with

Using -Thread 29G 4cm

Frown lines and Bunny lines



Frown lines

Thick lines need subcision

Inject thread under the wrinkles

Greater efficiency is achieved when combined with subcision
Insert 29G 4cm (5~10 sutures)

Bunny lines

Perform from upward to downward
29G 4cm about 3~5 sutures

Indian line and marionette line



Indian line

The part of under the eye
(MTS+filler+thread)

Treat along idianline, make
upward

Marionette line

Perform 서브시전 along the
marionette line.

(서브시전+filler+Thread)

Sagging Cheek



Take slow and long subcision
Perform in a manner as if
filling the entire area with
suture

Greater effect is achieved if
combine with filler.

Cheekbone reduction



Perform treatment with slight pull in upward direction along the cheek bone
Pull towards temporal muscle and eye rim.

Protruding oral cavity)



Perform treatment with
slight upward pull

Caution: area is very
sensitive to pain

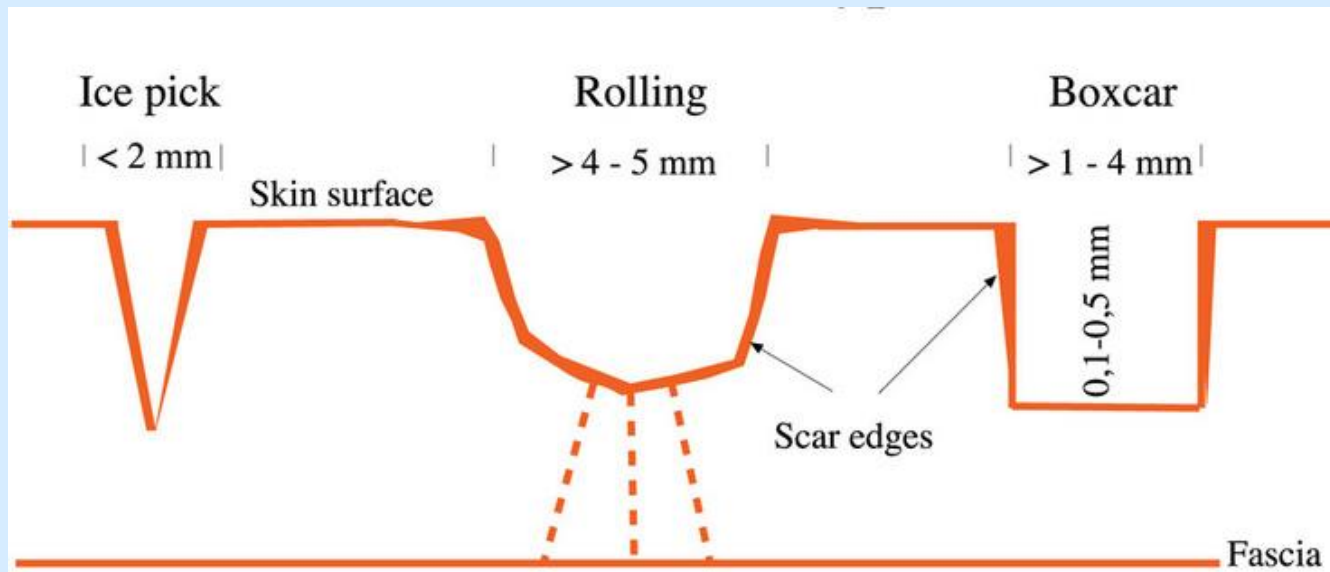
Hair loss



Use 30G 2.5cm

Treat 1~1.5 Cm space in
grid shape along the area
loosing hair

Scar Types



Scar Treatments

Scar Treatment	Best for this type of scarring
Dermabrasion	Shallow imperfections rather than "ice pick" scarring
Laser Resurfacing	Shallow imperfections rather than "ice pick" scarring
Chemical or Herbal peels	Very mild scarring
Punch Techniques	ice pick" scars - similar to deep chickenpox scars
Subcision	Most kinds of scars
Augmentation	Deeper scars
Saline Injections	Best for shallow scars; less effective on deep "ice pick" or "boxcar" scars

Linear & deeper scar types

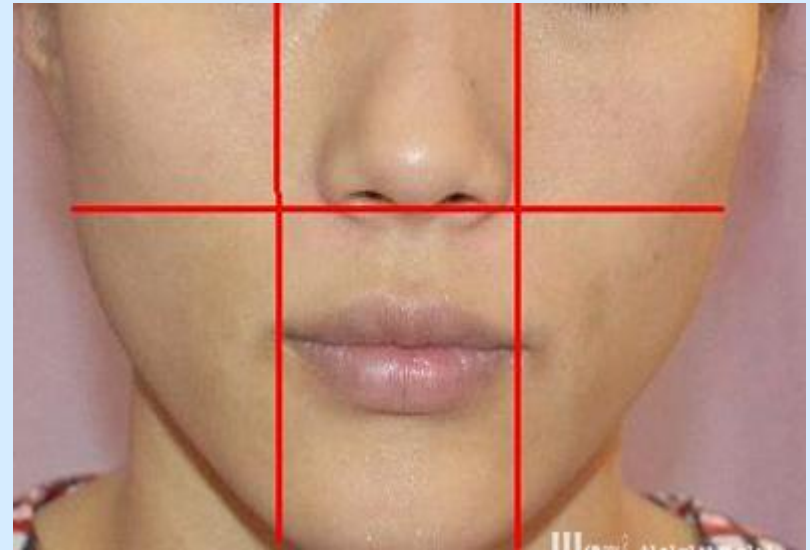
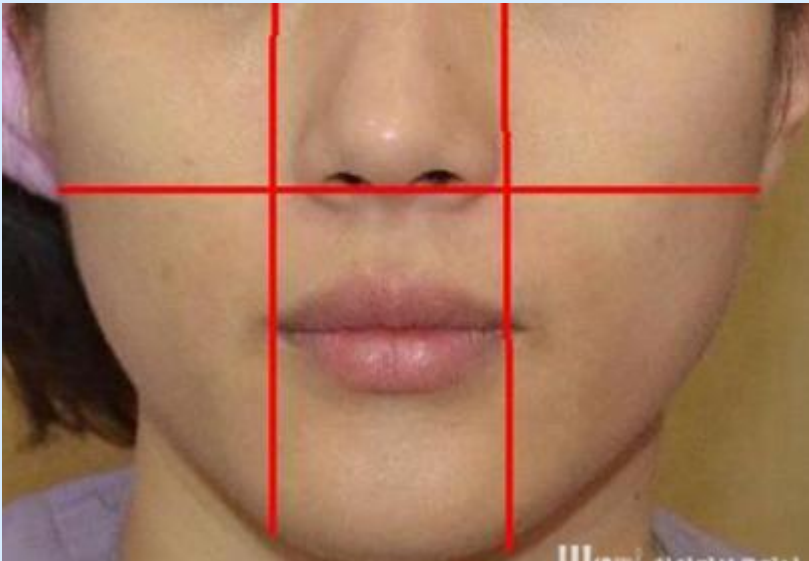


After 3 times per 2 weeks

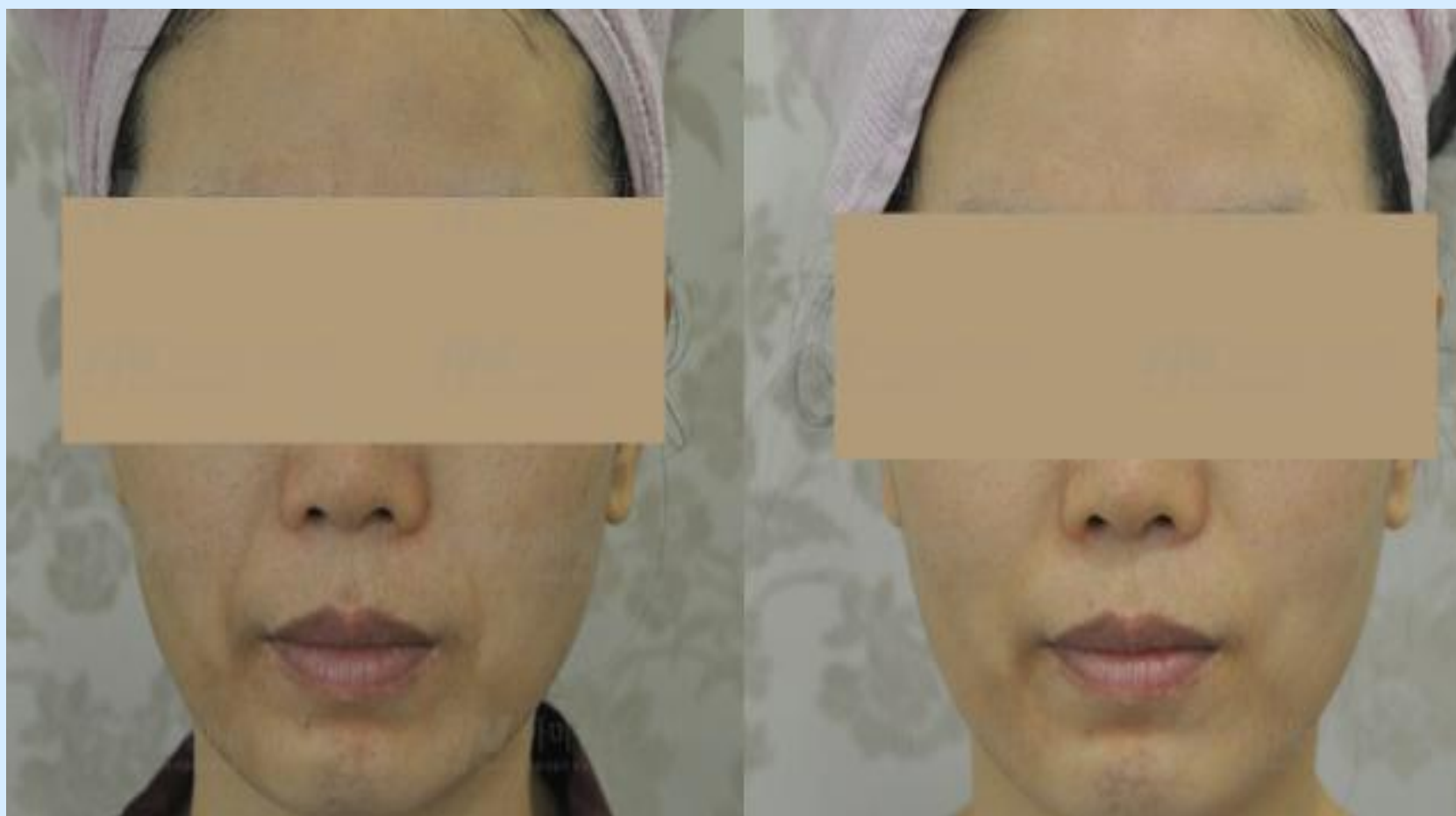
Insertion after subcision with
acupuncture needle(0.4mm)

MAKE IT V-LINE WITH I-THREAD























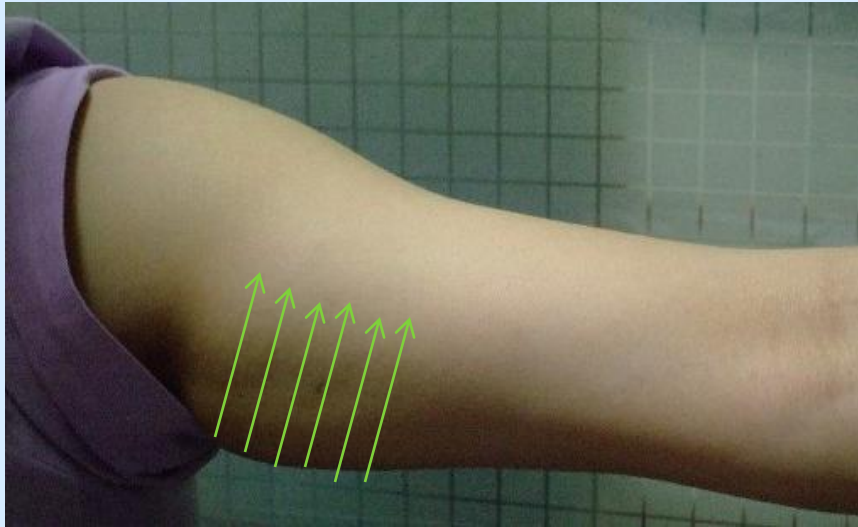






















i-THREAD

Make it perfect your skin