

What is Mesotherapy?

Mesotherapy is a series of multiple intradermal injections of very small quantities of hyaluronic acid and/or vitamins, minerals or other active ingredients using a very fine needle directly into and around the areas to be treated. In anti-ageing for example the product is injected along wrinkle lines over the face, neck, chest area and back of the hands. Anti-ageing mesotherapy can be carried out either manually using a syringe and small needle or with a mesotherapy gun. This procedure may be applied to all skin types for anti-ageing treatments or to slow the onset of fine lines and wrinkles.

Advantages of Mesotherapy

Mesotherapy is a safe technique. Mesotherapy Solution is placed directly into the target area thus minimizing side effects, allergies and drug interaction

Mesotherapy also is an effective alternative for the treatment of cellulite, localized fat deposits, and alopecia and face/neck rejuvenation. Unlike surgery, Mesotherapy is virtually painless, requires no post-operative recovery time, requires no heavy bandages or girdles, and no anesthesia is necessary. While many surgical procedures require one to two weeks of recovery, patients undergoing Mesotherapy have no interruptions to their daily life, while obtaining natural cosmetics rejuvenation.

Mesotherapy: Mechanism of Action

Mesotherapy employs both the physical (mechanical) and the chemical stimulation of circulatory competence unit, nervous competence unit, immune competence unit, and fundamental competence unit within dermis and subcutaneous tissue, which promotes the body's circulatory, lymphatic, and immune system to create a biological response and reverse abnormal physiology. Solutions injected intradermal remain in the injected area longer compared to subcutaneous injection, and act as a natural time-release agent for up to 7 days, the injected solutions act to adjacent problematic tissues by continuing to diffuse into the deeper tissues.

The technique involves the injection of substances to stimulate the mesoderm for various biological purposes. For instance, if the circulation is poor, a vasodilator is used; if excessive inflammation is present, an anti-inflammatory medication is used; or if inflammation/stimulation is needed; a fibroblast proliferating solution is injected. Conditions such as cellulite are due to lymph veno lymphatic insufficiency, therefore a stimulator of venous and lymph flow is used.

Skin Conditions:

Acne, Alopecia, Cellulite, Contusions, Eczema, Hair Loss, Herpes Infection, Hypertrophic Scars, Lip dystrophy, Male/Female Hair Loss, Obesity Stretch Lines, Psoriasis, Rides, Scar Disorders, Sun Damaged Skin, Telangiectasias, Venous Insufficiency, Vitiligo, Wrinkles

Medical Aesthetics:

Cellulite, localized fat deposits, wrinkles (face and neck rejuvenation), alopecia, scars, striate

Mesotherapy: Material and Technique

1. Material:

- Syringe: 3 ml, 5 ml, 10 ml
- Needle: libel's needle (4~6 ml/26~30 G), 13 mm/30G needle
- Injector guns: DHN, Pistor, Meso-system, mesalyse, etc
- Gloves
- Disinfectant: biseptine (chlorhexidine benzalkoniumchlorure), 70% alcohol

2. Technique of injections

- ME (Mesotherapy epidermique)
 - . Retarded effect, bleeding (-), pain (-) 30 G, 13 mm needle

- Papule (intra-basal injection)
 - . Intra-basal layer injection, < 0.1 ml /point
- Nappage (multi-pricking injection)
 - . semi-retarded effect
 - . 4 mm needle
 - . 2~4 injection/sec, 0.5~2 mm depth, 30~60
- PPP (Point-by-point)
 - . 4 or 6 mm needle
 - . 0.03~0.1 ml/point, 0.5~ 2 cm distances
 - . punctual & painful, more or less profound
- Mesoperfusion
 - . Sequential mesotherapy (MS) or Mesotherapy lente
 - . 2~13 mm depth, 5~45 min (1~5 sec injection 10~50 sec intervals, sequentially)
 - . effective esp. chronic pain
- MPS (Mesotherapie Pontuelle Systematisee)
 - . Dermo-hypodermic injection (2~10 mm) into fixed, objective, and reproducible points
 - Mesotherapie seche et mouillee
 - Mixed
- Classification by injection depth
 - . IED (intra-epidermic injection): < 1mm
 - Technique: ME, superficial nappage
 - . IDS (superficial intra-dermic injection): 1~2mm
 - Technique: papule, IDS nappage
 - . IDP (profound intra-dermic injection):2~4mm
- Technique: PPP, mesoperfusion
 - . IHD (intra-hypodermic injection):4~10mm
 - Technique: PPP, mesoperfusion, MPS
 - . DHD (dermo-hypodermic injection): used in MPS

Medications used in Mesotherapy:

Substances administered in Mesotherapy are pharmaceutical drugs, nutrients (vitamins, minerals, amino acids), plant extracts, and homeopathic agents. Commonly used medications are vasodilators, anti-inflammatory agents, muscle relaxants, lipolytic, photolytic enzymes, vaccines, and hormones. These compounds are often combined in cocktails with or without local anesthetics (procaine or lidocaine). All medications used are FDA-approved for their use. In combination, some medicines for Mesotherapy are used for 'off-label' purposes. A recent illustration of this distinction is Botox. Although Botox was FDA approved for controlling muscle spasms, the medical community embraced it for its cosmetic properties of controlling wrinkles. For many years, plastic surgeons and dermatologists used Botox for off-label purposes.

Medications used in Mesotherapy should meet the requirements of:

- Isotonicity
- Tolerance of skin or subcutaneous tissue
- Absence of pain, nodule formation, or necrosis
- Integration with the tissues of injected substances
- Absence of allergies or hypersensitivity
- Non-use of oily solution

- Avoidance of possible incompatibilities
- Efficacy verified

Treatment sessions and duration:

Mesotherapy treatments are typically given once per week. As improvement is seen, the treatments may be given less frequently, such as once every two weeks or once per month. The wide use of Mesotherapy, even by unqualified personnel, may be responsible for systemic and local side-effects, very often due to incorrect use of drugs and to errors in procedure. Above all this alternative medical process has been associated with the development of atypical mycobacterium infection, due to lack of aseptic measures.

General considerations:

Before Mesotherapy

- Confirm whether any allergy or skin problems (atopic dermatitis, infectious diseases) are present through medical interview and physical exam
- Diagnose areas for treatment
- Set goals
- Determine the schedule: frequency & duration

Patient Education

- Do not put any creams, body lotions, cosmetics on the treatment area on the treatment day.
- Wear clean clothes and avoid tight jeans.
- Stop taking medications such as aspirin, NSAIDs, dipyridamol, etc. 48 hours before procedure.

After Mesotherapy

- Bruises or slight swelling may appear at the injection sites.
- Healthy diet and regular exercise are encouraged.
- Results are fairly constant for changes in skin appearance and circulatory improvement.
- Results are variable for volume loss in suppression of localized fat cells depending on the extent of the problem areas. The changes in fat loss are very patient specific

Patient Education

- Do not take a bath or shower within 12 hours after treatment
- Do not get the procedures such as iontophoresis, ultra-sonolysis, electro stimulations, etc. within 72 hours.