Mesotherapy

IntAAC & PIT PDGKI
Jakarta October 15, 2016
Education and Credentials:
- Board certified in Anti Aging Medicine, Chicago, IL, USA, 2011
- Medical Specialist in Clinical Nutrition, UI, Jakarta 2006
- Master of Science in Clinical Nutrition, UI, Jakarta 2005
- Clinical Metal Toxicologist, The International Board of Clinical Metal Toxicology, CA USA, 04/2002
  - Certified in Chelation and iv Nutrition, ACNEM, 11/2014
- Certified in Exercise is Medicine, EIM Singapore, 11/2015
- Diploma in Cosmetic Science, Society of Cosmetic Scientists, Surrey, UK 1999
- Diploma International CIDESCO (Comité International d’ethétique Et de Cosmetologie) Zurich 1998
- Doktor der Medizin (Doctoral Program, dissertation), Freie Universitaet Berlin, Germany 1989
- MD, Freie Universitaet Berlin, Germany 1987

Professional Experience:
- Medical Director Gracia Patricia Specialist Clinic, kebayoran Baru, Jakarta since 2009
- Medical Specialist in Clinical Nutrition, Naval General Hospital, RSAL Dr Mintohardjo, Jakarta since May 2007

Affiliations
- Treasurer of Indonesian Physician Nutrition Specialist Association (PDGKI)
- Head of Scientific Division Indonesian Society of Anti Aging, Wellness and Regenerative Medicine (PERDAWERI)
- Vice chairman Department of Inter institutional Relationship Indonesian Medical Association IDI DKI Jakarta
- Treasurer of Indonesian Association of Healthy Aging (IAHA)
Disclosure

Speaker, moderator and trainers have no conflict of interest to disclose with respect to this presentation.
Battle of the bulge……Why so difficult?

‘Now can we stop talking about my body?’
What Barbie’s new shape says about American beauty
by Eliana Dockterman

Surgical procedures., liposuction abdominoplasty

“Lunch time procedures” minimal down times ≤ 2 hour
What Is an Attractive Body? Using an Interactive 3D Program to Create the Ideal Body for You and Your Partner

Kara L. Crossley, Piers L. Cornelissen, Martin J. Tovée
Beauty is not universal
Aesthetic Procedure
Reduce the appearance of adipose tissue

Candidate:
- Near ideal body weight
- Eat a healthy diet
- Exercise regularly
- Pockets of fat not responded to a healthy life style
- Realistic in expectations
- Seeking spot reduction of specific areas
- Not considering a surgical procedure
- Willing to maintain the results with a healthy, active lifestyle
Accumulation of fat in small quantities in areas of the body
Alterations in body contour.
- Abdomen
  - (“lifeguard or rolls”)
- Sides of the legs
  - ("riding pants")
- Shoulder and back of the arms
- Inside of knees, etc.
Thighs—“saddle bags,” cellulite
Flanks—“love handles”
Abdomen—“muffin top” and/or “abdominal pooch”
Upper arms—“bat wing” appearance caused by excess loose skin and fat hanging down below the arm
Back—“lower back rolls”
Insertion of needle(s) for alleviation of diseases

- From Hippocrates (400 B.C.)
  - Local application of cactus for shoulder pain
- Chinese acupuncture (since 2000 years)
- Injection of substances following the invention of the hollow needle since 19th century.

Mesotherapy is a medical technique developed in 1952 by the renowned French physician, Dr Michel Pistor

- Management of pain & vascular disorders
- “little, rarely and in the right place.”

Pistor was bestowed the Legion of Honor

("Legion d’Honneur")

Highest award to persons considered as national heroes with significant accomplishments in France.
Pistor coined the term ‘mesotherapy’ in his first publication of the technique, in a local medical journal in 1958.

As treatment of the mesoderm (the primary germ layer that develops into connective tissue, muscle and circulatory system) referring to the effects of local procaine on such wide number of tissues

He first administered procaine iv to treat an asthmatic patient and found that the patient’s hearing improved. He then started experimenting on superficial injections of procaine for various indications

Mesotherapy does not denote a treatment of any condition in particular; it simply describes a method of drug delivery

Publications:

1970: Mesotherapy Micro Injections
- published by Maloine

1970: Equivalent Pain Theories
- published by Maloine

1974: A Defined Therapy – mesotherapy
- published by Maloine

1976: A Practitioners Abbreviation of Mesotherapy
- published by Maloine

1984: An Abbreviation and Guide to Electronic Mesotherapy
published by Maloine


Multiple intra dermal or subcutaneous injections of a mixture of compounds (plant extracts, homeopathic agents, pharmaceuticals, vitamins, and other bioactive substances) in minute doses, using very fine gauge needles, to treat medical (mainly local) and cosmetic conditions.

The term ‘meso’ also means ‘middle’ and ‘mean’, reference to the injection route (into the middle layer of skin or ‘intra dermotherapy’)

And the mean dose of the medication used (dose in between allopathy and homeopathy).
According to Dr. Pistor, Mesotherapy is an allopathic, light, parenteral, polyvalent, and regionalized therapy.

1. **Allopathic:** Medications are included in the official pharmacopoeia.
2. **Light:** Lower doses are used as compared to the usual doses in traditional medicine.
3. **Parenteral:** Intradermal or subcutaneous injections are given with active drugs and procaine as vehicle.
4. **Polyvalent:** Due to its effectiveness on multiple diseases treated under varied specialties.
5. **Regionalized:** Treatment is delivered close to the site of disease.
Mechanism

- PC lipolytic activity affecting permeability of the adipocyte membrane & fat mobilization
- Add small quantities of sodium deoxycholate to increase the fat-dissolution effectiveness of PC through disintegration of adipocytes
- DC as emulsifier effective in removing small collections of adipose tissue.
- Detergent action of deoxycholate
- Cell lysis
- Thyroid preparations, aminophylline and isoproterenol
  - Stimulate insulin release which help in breaking down of fat cells.
- Skin acts as a natural time-release system when drugs are injected by mesotherapy
Chemical lipolysis through PC injections really works

- Procedure remains confidential in France
- Inconstant results, necessity to repeat injections, unclear legacy may explain that this very basic procedure remains unsuccessful
- Lipolysis injections for 5 years on a very limited number of patients
- Efficient on puffy cheeks, double chin, superficial cellulitis, liposuction
- Eyelid bags may be considered but not recommended
- Chemical lipolysis cannot compete with liposuction
- No drawbacks or complications which confirm the lipolysis network practitioners' opinion in more than 1000 users.

Copyright © 2010 Elsevier Masson SAS. All rights reserved.

*Ann Chir Plast Esthet.* 2011 Apr;56(2):112-9
Injection of the lipolytic substances
- Phosphatidylcholine and Deoxycholate
- fat cell necrosis rather than apoptosis
- However, additional studies evaluating different dosing and further time points after treatment are necessary


Detergent Effects of Sodium Deoxycholate Are a Major Feature of an Injectable PhosphatidylCholine Formulation Used for Localized Fat Dissolution

Adam M. Rotunda, MD, Hiroyuki Suzuki, BS, Ronald L. Moy, MD and Michael S. Kolodney, MD, PhD

Dermatologic Surgery
Volume 30 Issue 7 Page 1001 - July 2004

Background. Phosphatidylcholine injections are becoming an increasingly popular technique to treat localized fat accumulation. This formula is composed primarily of phosphatidylcholine and sodium deoxycholate, a bile salt used to solubilize the natural phospholipid in water. The mechanism through which this injectable phosphatidylcholine formulation causes localized fat reduction is unknown.

Objective. To investigate the active component and mechanism of action of an injectable phosphatidylcholine formulation in clinical use.

Methods. Cell viability and cell membrane lysis assays were performed on cell cultures and porcine skin after treatment with the phosphatidylcholine formula, isolated sodium deoxycholate, or common laboratory detergents Triton-X 100 and Empigen BB. In addition, we described the histologic changes after injection of these substances into porcine tissue.

Results. A significant and comparable loss of cell viability, cell membrane lysis, and disruption of fat and muscle architecture was seen in cell cultures and tissue specimens treated with the phosphatidylcholine formula and isolated sodium deoxycholate. These findings were similar to the effects produced after treatment with laboratory detergents.

Conclusions. The phosphatidylcholine formula popularly used in subcutaneous injections for fat dissolution works primarily as a detergent causing nonspecific lysis of cell membranes. Our findings suggest that sodium deoxycholate is the major active component responsible for cell lysis. Detergent substances may have a role in eliminating unwanted adipose tissue. It is advised that physicians use caution until adequate safety data are available.

ADAM M. ROTUNDA, MD, HIROYUKI SUZUKI, BS, RONALD L. MOY, MD, AND MICHAEL S. KOLODNEY, MD, PHD HAVE INDICATED NO SIGNIFICANT INTEREST WITH COMMERCIAL SUPPORTERS.
## Cocktail variation

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPC+DC</td>
<td>5cc</td>
</tr>
<tr>
<td>DMAE</td>
<td>5cc</td>
</tr>
<tr>
<td>Centella</td>
<td>2cc</td>
</tr>
<tr>
<td>L carnitine</td>
<td>5cc</td>
</tr>
<tr>
<td>Rutin &amp; melilot</td>
<td>2cc</td>
</tr>
<tr>
<td>Artichoke extract</td>
<td>3 cc</td>
</tr>
<tr>
<td>PC</td>
<td>5cc</td>
</tr>
<tr>
<td>Organic silicium</td>
<td>5 cc</td>
</tr>
</tbody>
</table>

**Notes:**

L carnitine and PC use one right after the other.
LOCALIZED FAT REDUCTION - BODY

Many names have emerged with the surge in the popularity of Mesotherapy and the use of Phosphatidylcholine for the removal of localized fat had been coined many terms: Lipodissolve, MesoSculpt, Thinject, Mesoplasty, FlabJab, Melt Away...

The procedure for localized fat consists in multiple injections within the fat of a mixture of primarily Phosphatidylcholine (PPC). Additions of medications including Hyalurondase, Artichoke and Collagenase are also indicated.

OVERVIEW OF PROCEDURE:

Injection Depth: 6mm to 13mm
Injection Spacing: 2 - 10cm apart
Injection Amount: 0.2cc - 0.8cc

Injection Technique:
1. Perform the procedure with the patient lying down. Position the patient to present the best angle for application, which must always be perpendicular to the skin. Inject with the bevel of the needle upward.
2. Map the area to be treated in each session.
3. Introduce the drugs smoothly with a regular interval between each dose.
4. Take care to respect the locations of the vascular and nervous systems, in order to diminish the possibility of hematoma.

Primary Ingredients Used:
- Phosphatidylcholine 100mg/ml
- Procaine 20mg/ml
- Aminophylline
- L-Carnitine 500mg/ml

Dosage:
- The maximum dose of PPC in one session over multiple areas should be 2500mg. It is advisable to do an initial session using no more that 500mg to see side effects etc.
- Lidocaine or Procaine is suggested to be used in conjunction with PPC.
- When the ingredients are reconstituted they must be used within 24 hours or discarded.

Treatment Schedule: 1-4 weeks apart this is dictated by which protocol is used. The number of treatments required varies depending on the amount of and location of fat being treated, the goals of the individual patient and whether they are following a healthy diet and exercise regimen.

Pre Treatment:
Local anesthetic cream can be applied prior to treatment, not essential but may be helpful for sensitive patients. Ice can be applied prior to treatment. Ice will achieve the numbness of anesthetic and also help reduce swelling.

Post Treatment:
Encouraged 72 hours after treatment and continued daily between treatments massage can be effective in reducing the instance of nodules. Loose clothes are advised to be worn after treatment for 2-3 days.

Considerations:
PPC is not recommended for children, pregnant women, nursing mothers, diabetics with vascular concerns, and persons with autoimmune diseases, people who have liver disease, persons who are severely obese or anyone with an acute or chronic infection.
Beta Blockers and Hypothyroidism can diminish results.

Side Effects:
Swelling, redness and bruising may result.
TECHNIQUE OF MESOTHERAPY PROCEDURE

1. Preparation of the cutaneous surface prior to injection
2. Penetration of a small quantity of the active agent
3. Introduction of the needle to the skin from a depth of 2 - 6 mm
4. Manual or Device assisted application using the papule, nappage or point by point techniques.
5. Apply drugs with the patient lying down
6. Map the area to be treated in each session
7. Position the patient to present the best angle for application. Application must always be perpendicular to the skin
8. Introduction of the needle to the skin from a depth of 1mm - 12mm based on procedure
9. Injection of 0.1 - 0.8 ml. of the medication applied symmetrically with a separation distance of 0.50 - 5 cm
MESOTHERAPY INJECTION TECHNIQUES

Whether you choose to administer Mesotherapy manually or with a Mesotherapy gun the choice of injection technique is important as it determines the quality of the results obtained. Depending on the injection site, the pathology treated, the structure of the dermis and the products injected the results will vary considerably according to the technique.

Generally, according to the depth, working from the epidermis to the hypodermis, a distinction is made between one of these 3 techniques:

PAPULE: 1 to 2mm, with bevel upwards
NAPPIAGE: 2 to 4mm, angle of 30° to 60°
POINT BY POINT: deep injections, 4 to 12mm

PAPULE

This is a superficial intradermal technique, which consists of injecting the product at the junction between epidermis and dermis, peeling epidermis from the basal lamina.

The tip of the needle is inserted into the most superficial layer of the skin and a depth of between 1 and 2 mm, with the bevel facing upwards. A pale, clearly delineated papule appears at the time of injection. Its absence is a sign of poor technique. The papule fades within the space of a few minutes and disappears entirely within the next 30 minutes. This technique is particularly suitable for wrinkles and immunostimulation.

NAPPIAGE

This technique was developed by Dalloz Bourguignon and is the most commonly used technique.

Nappage is a superficial intradermal technique which consists of performing a series of injections 2 to 4 mm apart while continuously maintaining a regular and constant pressure on the plunger. The needle is inserted at an angle of 30° to 60° and to a depth of between 2 and 4mm.

The product/medication is deposited on the surface is left in contact with the epidermis for 3 to 5 minutes to assist its penetration. There is a variation on this technique with an epidermal nappage which consists of applying the product to the epidermis, at a depth of less than 1 mm. This has the advantage of causing minimal bleeding, if any, bleeding.

POINT BY POINT

This is a deep intradermal or hypodermic injection technique, consisting of separate injections at depths from 4 to 12 or even 15 mm depending on the area and the indication for treatment.

P.B.P is generally indicated in rheumatology, in sports pathologies and in aesthetic medicine for the treatment of cellulite. In the latter case, it is particularly suited to targeting deep nodules or for fibro-sclerous cellulite.
Papular technique
- Reagents are injected into the dermo–epidermal junction

Nappage method (French for Covering) (Gust or Salvo)
- Injections penetrate to a depth of 2–4 mm (more superficial)
- 4mm needle
- Angle of 30–60° or 45°
- Light, constant positive pressure on the plunger
- Mimics shaking a salt shaker or the action of a sewing machine). At each site, a drop of solution is introduced.
- More discomforting procedure to the patient.

Point-by-point injection into the deep dermis.
- First described by Dr. Pistor
- 0.02 ml to 0.05 ml of drug solution
- Perpendicular to the skin (4-15 mm deep)
- 1 cm to 2 cm apart.

**Epidermic**

- The most superficial (1 mm deep) of all the techniques in which the basal layer of skin is not penetrated
- Needle size of 27 to 31 gauges
- Bevel oriented away from the skin and dragged along with light, positive pressure applied to the plunger
- Grid pattern at 1-cm intervals over the entire affected area.
REQUIREMENTS FOR MESOTHERAPY

ALL MATERIALS THAT TOUCH THE PATIENT'S SKIN SHOULD BE STERILE AND DISPOSABLE.

1. INGREDIENTS:

All approved, skin-compatible, systemic (intravenous, intramuscular, subcutaneous or intradermal) medications with known effectiveness can be used.

In Mesotherapy all ingredients must be: water soluble, isotonic, non-allergenic and do not cause nodules, abscess or necrosis at the injection site.

2. SYRINGES:

Syringes are used ranging from the classic 1cc. insulin syringe, to the 5, 10 or 20cc syringes. Most commonly used syringes in Mesotherapy are: 5cc to 20cc luer lock syringes & 5cc to 20cc slip tip syringes.

3. NEEDLES:

The so-called “Lebel needle” is the needle most commonly used in Mesotherapy.

Recommended needles for applications:
Face and Neck - 4mm 30G Mesotherapy Needles
Cellulite & Fat - 6mm 30G Mesotherapy Needles and ½ inch 30G Needles

4. MULTI INJECTORS & PLATES:

Circular Multi Injectors - 7 NEEDLES - suitable for all body parts
Linear Multi Injectors - 5 NEEDLES - suitable for all body parts
Mesotherapy Gun - suitable for all body parts and allows for different injection techniques

5. AUTOMATIC INJECTION DEVICES:

There are numerous models and types of automatic, electronic, mechanical guns available to facilitate the practice of Mesotherapy.

Practitioners who use injection devices find that these devices offer significant benefits in rendering treatments less painful for patients, more comfortable for the practitioner, as well as adding precision and consistency to injections.

Some advantages of Mesotherapy guns include:

1. Increased comfort level for patient and practitioner
2. Reduced pain due to skin stabilizer, speed of needle and consistency of injections
3. Elimination of operator wrist and hand fatigue
4. Accuracy - Programmable and consistent - no room for operator error
5. Versatility - accurately performs continuous, nappage, mesoperfusion & dosimetric modes
6. Speed - Procedures are faster.
Multiple injections of small doses of medications
- Precise locations
- Single sitting
- Highly demanding to the therapist.

To overcome this difficult task, many practitioners in Europe and South America use a device called ‘mesogun’.

Benefits of mesogun
- Faster injections, precise dose delivery, consistent depth of penetration and more comfort for the physician and patient

Some experts use a special technique called ‘mesoperfusion’ same volume is injected over 10 minutes instead of 30 seconds as in a normal session.
Evaluation of mesotherapy as a transdermal drug delivery tool.

Kim S¹, Kye J², Lee M¹, Park B²

Abstract
BACKGROUND: There has been no research about the exact mechanism of transdermal drug delivery during mesotherapy.

OBJECTIVE: We aimed to evaluate whether the commercial mesogun can be an appropriate technique for a transdermal drug delivery.

MATERIALS AND METHODS: We injected blue ink into the polyurethane foam or pig skin with three types of mesotherapy using a commercial mesogun, or local made intradermal injector, or a manual injection of syringe. To assess the internal pressure of the cylinder and drug delivery time, we designed the evaluation setup using a needle tip pressure transducer.

RESULT: All types of injectors induced adequate penetration of blue ink into the polyurethane foam without backflow. In the pig skin, blue ink leaked out rapidly with the backward movement of the needle in the commercial mesogun in contrast to the local made injector or the manual injection of syringe. When the time for backward movement of the syringe approaches 1000 ms, the cylinder pressure of the syringe is saturated at around 25 mmHg which can be translated into the dermal pressure of the pig skin.

CONCLUSION: There should be sufficient time between the insertion and withdrawal of the needle of injector for the adequate transdermal drug delivery and it must be considered for mesotherapy.

© 2015 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd.

KEYWORDS: drug delivery; intradermal injection; mesotherapy; pressure variation

Aesthetic Oculofacial Rejuvenation: Non-Invasive Techniques

By Marian Zilkha, Alessandra Haddad
Needle free drug delivery system

Injex 30 is easy to use. Draw the dose into the ampoule using the vial adapter. Attach the ampoule to the injector. Select the injection site, and push the trigger to deliver the injection. It's that simple. The Injex 30 Needle Free Injector System delivers 30 insulin units or 0.30 ml.

[Images of the Injex 30 components: Injector, Vial Adaptor, Connector]
Side Effects

Extremely rare in experienced hands and if are mild.

- Much less dosage than one large dose used in modern medicine.
- Non-specific common adverse effects
  - Nausea, vomiting, diarrhea, mild pain, skin hyperesthesia, edema, itching, erythema and tender subcutaneous nodules at injection site.
- Pigmentation problems
  - PIH and urticaria pigmentosa might remain for many months,
- Rarely : full-thickness skin and fatty tissue necrosis
- Hypersensitivity reactions immediate or delayed (especially to hyaluronidase, collagenase)
  - Pruritic, maculopapular rash distant from the treated area (phosphatidylcholine allergy)
- Adverse effects due to faulty techniques
  - Localized infections, scars and subcutaneous nodules.
  - Several cases of non tuberculous mycobacterial skin infections manifesting as nodules and draining abscesses
  - Poor aseptic measures occur within 1 and 12 weeks of the procedure.
BMI > 30
Hypersensitivity to any of the components
<18 years of age
Pregnancy, lactation
Anticoagulants, cardiac drugs (amiodarone, hydralazine, calcium channel blocker, beta blocker)
Insulin dependent diabetes
Liver and kidney disorders
AIDS
Seizure
Lupus
The crux of mesotherapy
- No rigorous scientific studies comparing it to existing modes of gold standard therapy in a given condition
- Scarcity of knowledge about the efficacy, mechanism of action and long-term consequences
- Available evidence are of low validity or even not encouraging.
- We may have to wait for such studies to accept mesotherapy as a standard mode of therapy.

Federal drug administration (FDA), USA, has not approved this method of treatment for any indication. The CDC has recommended that “providers should adhere to recommend standard precautions, follow safe-injection practices with appropriate aseptic techniques, and inject only FDA approved products that are prepared following guidelines to ensure sterility as described in the FDA’s good manufacturing practices.
Ca. 16,000 US physicians use mesotherapy in their daily medical practice

Growth of number of mesotherapy-trained physicians by 300 per month

Publication of a dedicated journal (American Journal of Mesotherapy), established clinics in reputed hospitals

Mushrooming of mesotherapy centers across the globe

Conduct of numerous international congresses

American Academy of Aesthetic Medicine is one among the leading organizations advocating quality physician training and conducting professional assessment for certification in mesotherapy.

The needle of evidence oscillates between

- safety and efficacy on the one end and popularity on the other

The optimists would be content with the oft repeated quote

‘Just as absence of proof is not proof of absence, lack of scientific validation is not proof that it does not work’


Although popular in Europe for many medical purposes, it is used for local cosmetic fat reduction in the United States.

Major mesotherapy safety concerns include injection site infections from poor sterile technique.

Cosmetic mesotherapy directs the area from which fat is lost to improve self-image.

Studies were of relatively small number, many with limited sample sizes.

Future research should be directed towards achieving a Food and Drug Administration indication rather than continuing expansion of off-label use.
We are all dietetic sinners; only a small percent of what we eat nourishes us; the balance goes to waste and loss of energy. William Osler

More questions?

dokter@graciaestetika.net
OVERVIEW OF PROCEDURE:

Injection Depth: 2mm to 6mm
Injection Spacing: 2 - 4cm apart
Injection Amount: 0.1 - 0.2cc
Injection Method: Papule, Nappage or Point by Point Method.

Injection Technique:
1. Disinfect the area to be treated with appropriate solution.
2. Perform the procedure with the patient lying down. Position the patient to present the best angle for application, which must always be perpendicular to the skin.
3. Inject with the bevel of the needle upward.

Primary Ingredients Used:
Hyaluronidase 150U/ml
Phosphatidylcholine 50mg/ml
Aminophylline 25mg/ml
L-Carnitine 500mg/ml

Treatment Schedule: Every 1 - 2 weeks
Maintenance Schedule: Every 3 - 4 months

Pre Treatment:
Local anesthetic cream can be applied prior to treatment, not essential but may be helpful for sensitive patients.

Post Treatment:
Loose clothes are advised to be worn after treatment. Patients should avoid exposure to the sun or solariums for 24 hours.

Considerations:
Do not perform an ionisation session with cellulite treatment in the same day as it increases the risk of a skin allergies occurring.

Side Effects:
Itching, redness and minor bruising may result.
Meso Lift

Overview – active substances in MesoLift

| Carrier solutions | PROCAIN 1–2 % or lidocaine 1–2 %, NaCl 0.9%  
|                   | Conjonctyl® (monomethyl trisilanol salicylate) |
| Biostimulants     | Non-cross-linked hyaluronic acid, Na-DNA  
|                   | Collagen, elastin, retinol, glycolic acid |
| Stem cell activators of plant origin | Proliferation of epidermal stem cells ↑, growth factors (IGF-1, bFGF, VEGF, TGF-β1) |
| Herbal remedies   | Ginkgo biloba, Centella asiatica |
| Vitamins          | A, B, C, E, dexpanthenol |
| Building blocks for protein synthesis | Amino acids for collagen and elastin production ↑, e.g. taurine  
|                   | Ubiquinone (coenzyme Q 10), glutathione, pyruvate |
| Regulation of muscle tone | Muscle tone ↓ (relaxation): botulinum toxin (POM), argireline  
|                     | Muscle tone ↑ (stretching): DMAE (anti-sagging) |

Acetyl hexapeptide 3
Astaxanthine
DMAE

White booster
Eye Treatment
Cheek bone
Nose
Frown line
Face Shaping
Double Chin
Hydrating
Acne
Scars
MESOTHERAPY CONSENT FORM

I, ____________________________, voluntarily consent to undergo Mesotherapy treatments provided by ______________________ or other licensed doctors, nurses, or qualified staff members employed by the practice.

I understand that Mesotherapy can be used for many conditions and I want to have treatment for the following:

- Localized Fat Reduction - Area/s ____________________________
- Cellulite Treatment - Area/s ____________________________
- Mesolift - Area/s ____________________________
- MesoGlow - Area/s ____________________________
- Mesotherapy for pain - Area/s ____________________________

I hereby consent to the Mesotherapy treatment of which I understand that more than one (1) treatment is required. I understand that the treatment requires many small injections around the area(s) to be treated. I understand that the administration of topical anesthesia may be used if deemed needed.

I understand that the benefits with Mesotherapy will vary but may include: a decrease of cellulite, an increase of skin tone, a decrease of wrinkles and may eliminate or decrease pain.

I understand that there are alternative treatments available for the reduction of fat, wrinkles, cellulite and pain. The following are a list of alternative treatments available. However, this list is not in any way considered inclusive of all other available treatments.

- Face Lifts - Dermabrasion - Facial Peels - Liposuction - Endermologie - Prolotherapy - Pain Medications
- Nerve Blocks - Cortisone Injections

I understand that there are some risks with any procedure. Complications of Mesotherapy are rare and usually self-limited, but include the following:

1. Discomfort: Medication is injected with tiny needles just below the skin. There may be brief minimal discomfort from the injections.
2. Bruising: Occasionally the needle may puncture a small blood vessel resulting in a bruise.
3. Swelling and Redness: This may result following the procedure as the medication begins to work.
4. Scarring: Scarring may result from multiple injections, but this is very unlikely.
5. Allergic Reaction: Although exceedingly rare, the possibility exists of an allergic reaction to the injection of Mesotherapy medications.
6. Infection: Since Mesotherapy treatment involves injections, there is a theoretical risk of developing an infection at the injection site. This is also exceedingly rare.
7. Discoloration: Transient or permanent skin pigmentation changes can sometimes occur at injection sites.

By my signature, I acknowledge that I have been informed about the above procedure and the medications and give consent to its use in my treatment.

1. I have met with the Doctor who is overseeing my treatment and have discussed all treatment options available to me.
2. The Doctor has informed me and I understand that the result of Mesotherapy is individual and vary depending on the area treated, skin type and the injection technique, and the use of different products. Therefore, no guarantee can be made as to the results of my treatment.
3. I understand that the effects of the treatment with these products can last on average, 3 or more month with complete treatment, but that in some cases duration of the effects can be shorter or longer. Touch up and follow up treatments may be needed to sustain the desired degree of my treatment.
4. I agree that this constitutes full disclosure, and that it supersedes any previous oral or written disclosures.
5. I understand that this treatment is strictly for cosmetic purposes and will not be covered by insurance.
6. I understand that I am responsible for all costs payable at the time of service.

By my signature, I certify that I have thoroughly read and understand the contents of this form and the disclosures listed above were made to me.

Patient’s Signature ____________________________ Date ______________________
## Mesotherapy Treatment Record

<table>
<thead>
<tr>
<th>Patient Name:</th>
<th>Date:<strong>/</strong>/__</th>
<th>Time:__:_ _</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician:</td>
<td>Nurse:</td>
<td></td>
</tr>
<tr>
<td>Allergies:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedure:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment Number:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topical Anesthesia:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Prep:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Tx Measurements:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>Syringe 1</th>
<th>c.c</th>
<th>c.c</th>
<th>c.c</th>
<th>c.c</th>
<th>c.c</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Syringe 2</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
</tr>
<tr>
<td></td>
<td>Syringe 3</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
</tr>
<tr>
<td></td>
<td>Syringe 4</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
</tr>
<tr>
<td></td>
<td>Syringe 5</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AREAS</th>
<th>c.c</th>
<th>c.c</th>
<th>c.c</th>
<th>c.c</th>
<th>c.c</th>
<th>c.c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Used</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
<td>c.c</td>
</tr>
</tbody>
</table>

Total c.c used: __________

Follow Up Procedure Due: __________________

Notes: __________________

Notes: __________________
PATIENT HISTORY AND CONTACT INFORMATION

Sex: □ Male □ Female  DOB: ____________________  Age: ____________________

Title: ____________________  First Name: ____________________  Last Name: ____________________

Address: ____________________  City: ____________________  State: ____________________  Zip: ____________________

Home #: ____________________  Work #: ____________________  Mobile #: ____________________

Email: ____________________

MEDICAL HISTORY

Are you pregnant? □ Yes □ No
Are you breastfeeding? □ Yes □ No
Do you have a history of blood clots? □ Yes □ No
Have you ever suffered a stroke? □ Yes □ No
Do you have herpes? □ Yes □ No
Do you have cancer? □ Yes □ No
Do you have any allergies? □ Yes □ No

If so please list:

Do you suffer from or have a history of:

- Anxiety □ Yes □ No
- Asthma □ Yes □ No
- Blood Pressure □ Yes □ No
- Cardiac □ Yes □ No
- Depression □ Yes □ No
- Diabetes □ Yes □ No
- Thyroid Problems □ Yes □ No
- Menopause □ Yes □ No

List your current medications:


SURGICAL HISTORY


OFFICE USE – TO BE FILLED IN BY STAFF

Treatment Advised: ____________________

Desired Treatment Goals:

Height: ____________________  Current Weight: ____________________  Goal Weight: ____________________  Blood Pressure: ____________________

% of body fat: ____________________  Total Fat: ____________________  BMI: ____________________


NOTES: ____________________