ABSTRACT

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MESOTHERAPY IN LIPODYSTROPHIA IN 2004

How to get an efficient treatment in Mesotherapy?

You need to limitate the enrolment of women which have a BMI (body mass index) between 18 and 25 or fat mass between 20 and 27% of body weight impedancemetry;
Motivate this objective to the patients before undertaking a serious and efficient treatment of lipodystrophia
-Require a surgical act on major veins insufficiency together with ostial incontinency with vein doppler before a mesotherapy treatment.

Necessary Additional steps
Diet follow up of the patient: such as proteins diets seems, at least over the first weeks an excellent indication and need to be strictly followed like a food re-education.

Some additional recommendations in treatment
Set a regular physical exercise: at least one hour three times a week of continuous physical exercise to mobilise major muscular structure (lipolysis begins only after the first twenty minutes)
It is always bilateral, localised at buttocks level, hips and internal face of the knee, Sometimes on calves or on arms. It is mainly concerning women with Gynoid figures. It is painful to pinch and roll, sometimes it creates «padding» like thick orange skin, at a later stage you can see it without doing any manipulation.

Genetical, ethnical and geographical Factors
Lipodystrophia affect exclusively women of gynoid constitution, Food habits and alimnetation

Two different sorts of adipose types are observed separately or together.
One genetic type: Gynoid fat, which is mainly localised supra and sub troncharian (hip) internal face of the knees and thighs (Alpha 2++)
One metabolic type: directly related to the food habit, which is mainly localised on the belly, waist, hips and inferior members (Bêta )
This lot can be added to the previous one and of course worsen the pathology
The android and gynoid balance of the adipocyte is submitted to the LPL itself oestrogenous dependant.
In summary, cellulite is made of an altered adipose tissue (volume increase of adipocyte), infiltrated of water, and poorly vascularised, in which balance and quantity are multi-factorials. The whole of cellulite nodules, behaves like a foreign body autonomous, and finally like a "bag" with a valve which will let the water and lipids in but would not like to release them.

Doc.Marthan cocktail and Protocol

Doc.Marthan cocktail will give you a quantity of 12ml mixture that he will inject with a MESOGUN, MESOMEGA.

Mesomega will give you possibility to set a 5 or a 10 ml syringe to programme at 5.00ml/ mn and to inject about 4 seconds each point in continuous mode, points are alined and 1cm apart (diffusion is always in circle of 1cm)

So that the quantity to use is according to the area of treatment.
The number of sessions is so, limitate because the efficiency of the product is complete and fast.
One session on the cellulite localised area gives an average reduction of 1,5cm of circumference after 2 weeks.

Formulation doctor Marthan cocktail

Procaïne
Buflomedil
Etamsylate
Vitamins + mineral salts + AA + co enzyme
Cafeine
Silicium (we have now in France and it is called CONJONCTYL)
All the lipodystrophia area from 6 to 10 mm according to the skin thickness and the importance of cellulite

IDS in manual nappage, more simple and faster after assimilating the technique.

Punctures area
Take the measurements (circumference of thighs, abdomen for instance on Day1 marking some natural anatomic references which are precises and easy to find again)
1 treatment of Doc.Marthan cocktail on D1
1 or 2 Session of endermology or Lymphatic Drainage from D8
Control measurement and 1 treatement Doc.Marthan cocktail D16
1 or 2 Session of endermology or Lymphatic Drainage from D24
Following sessions according to the results obtained and the request of patients
D1, after clinical examination, weighing on impedencemetry scale, taking mesurements with anatomical and references that you can fix again
Treatment with the cocktail between 6 and 10 mm of deepness fixing to a needle of 30G on a syringe of of 5 to 20 cc according to the surface of treatment, a point every centimeters

D8
Session of endermology or lymphatic drainage

The loss of circumferences after 2 sessions is in average of 3 cm
Next session according to patient request

COCKTAILS RECEIPT
Doctor Jules Marthan’s cocktail
- Procaïne 2 cc
- Caffeine 1 cc
- NCTF 2 cc or CRP 1000
- Dicynone 2 cc or Rutine mellilot
- Buflomedil 3 cc
- Conjonctil 2 cc

HAIR LOSS In mesotherapy:

In France hair loss affects 40% of men before aged 45 and 80% of men after 65 years.
In the general population of France approximately:
15 000 000 persons (primarily men)

Hair symbolizes:
Power in man (Samson)

Sexuality in the women
100 to 150000 in average young adult (variation of 30%)
100 to 150 per cm2 (up to 300)
The way hair grows follow a certain pattern that forms a spiral.

If the all of the hair is placed end to end it will be approximately for 3 km for short hair, and 30 km for long hair.
The average strand of hair can withstand 50 gr of traction, the entire head 500 kg

Composition
- Invisible bulb
- Visible shaft
The shaft is made up of three layers
  - In center the medulla
  - The cortex which surrounds (80% of the total)
  - The external cuticule

Like all organs the hair has stages of growth, actually it has three stages the
growing phase, the resting phase and then it falls out. From a same root (hair follicle) will grow 20 to 30 time in each individual. The cycle lasts approximately 3 to 5 years.

Hair grows in different cycles

• **Anagen**: 2 to 5 years, active growth (from 1 to 1,5 cm per month) on a normal scalp approximately 85 % of hair is in the anagenic cycle.
• **Catagen**: resting phase which lasts about 3 weeks, with interruption for the activity of the cells of the matrix, the bulb retracts and is keratinized (Catagen represents 1%)
• **Telogen**: progressive death of the hair shaft which lasts 3 months, and is replaced by new growth (about 14%).

Growth of 0.3 to 0.5 mm per day
Faster growth in children, women, then men, faster on the top of the head, rather than in the back
In the Asian population the cycle of hair growth is the longest.
Sex of person can be determined by chromosomal analysis of the hair, of a 25th week embryo.

Hair is composed of KERATIN a fibrous protein connected with bridges of sulfur molecules
The growth of the hair is controlled by the regular supply of:
Sulfur Amino acids Acides (cystine, methionine) these acides form the keratin chains.
Poly-unsaturated acid are essential (omega 3 omega 6)
Regular supply of zinc, copper and iron are also very essential for the vitality of the hair (alopecia is seen in anemia and in poor nutrition).
I.e : Many women loose hair when their iron is low (e.g if the ferritin is less than 40 mcg, prescription of iron for 3 months (65 milligram tabs daily) will prevent hair loss and improve hair growth)

The supply of daily vitamins are essential for the health of the hair, for example:
Vitamin A (essential to keratinisation, in the lack of vitamin A, causes dry and brittle hair.
Vitamin B5 (beepanthen)
Vitamin H (biotin), prevents the over production of sebaceous glands, and stimulate growth of follicule
Vitamin B6 (pyridoxine), intervenes as a catalyst in the production of the sulfur amino acids.
Vitamin B12 : major role in the synthesis of methionine another sulfur amino acid.

Each person looses approximately 50 hairs per day.
(long hair loss is more impressive than shorter hair loss!).
Hair loss is increased in the post-partum period, during periods of stress, and after severe infectious diseases.
If you loose more than a 100 per day you should consult a physician (to perform a trichogram of the hair shaft).

Most frequently seen:
Androgenic alopecia frequently seen in men more than 18 years of age.
Directly influence by male hormone especially testosterone (eunuques are never
bald, neither boys before puberty!).
Testosterone shortens and accelerates the cycles of hair growth, especially on
the top of the hair (vertex).

Androgenic (commonly known as male alopecia), affects men only after puberty and
only in the area genetically programmed, and rarely females.
All the cycles of the hair growth (25 in one life) are accelerated.
Sometimes it is accompanied with hyper secretion of the sebaceous glands of the
head as well as the face leading to acne
Maximum of sexual appeal for teenagers!

The hair of the low crown (or hypocratic crown) that never falls and is
generally used for hair re-implantation.

Androgenic alopecia
Treatment should start early and is composed of topical application of
minoxidil along with the use of Propecia.
It is a life-long treatment (if you stop for more than 3 months hair loss will
re-occur)
Other treatments are mainly topical but mesotherapy directly supplies
nutritional elements indispensable to maintain healthy hair.
Here again you will use a Mesogun, MESOMEGA in nappage mode in view of
spreading and covering the whole area of treatment easily with minimun pain for
your patient.

Formulation
Lidocaine 1% : 1 ml or Procaine 2% : 1ml
Zinc : 1 ml
Biotin (vit H) : 1 cc or Bepanthen (Vit B5) 1 cc
Buflomedil : 1 ml
Given in nappage or in IDS papules at 2 mm depth
Lidocaine 1% : 1 ml
NCTF 135 : 2 ml
Minoxidil

Area of treatment : only the areas in the balding process, and treatment in the
area where the hair is not programmed genetically to fall is unnecessary, as
well as the area that are completely bald, only re-implantation is helpful.

Frequency of the treatment is every two weeks for 3 months then once a month
every six months, then once every three months.

MESOLIFT A NEW CONCEPT

**Long lasting biostimulation**
Use of Hyaluronic acid non reticulate in intra dermal strict to treat the face,
the neck, the decollete and the back of the hand.
The principal of the treatment relies on the properties of tissue fillings and
the maintain of the hydratation by presency of molecule of hyaluronic acid in
the epiderm and in superficial derm

Natural bio Hyaluronic Acid interactif

Essential component of the connective tissue

It is a polysaccharid belonging to the family of Glycosaminoglycane (GAG), it contributes to the regularity of the hydratation of the skin.

It is easy to dissolve by the action of the enzymes and free radicals

Formulated in water solution at 1% it forms a structuring hydrating gel that injected in strict ID increase the inter cellular space and maintain elasticity and hydrated and young aspect.

Natural Hyaluronic Acid Action

Hydrating and restructuring : large capacity to capture and keep the water molecules (natural and intense hydrating) Sun damage active

Loose skin active (skin collapse, thinner derm and small wrinkles)

Natural Hyaluronic Acid Action

Hyaluronic acid use singlely will so maintain a constant hydrating and skin tension for about one and half month.

So it is then necessary to renew the treatment so that you maintain the results that is always good and easily seen by the patient.

Possibilities of use

Treatment of face

In prevention on young skin

Firming Action on older skin

Hand treatment with thinner, dehydrated epiderm and dermal atrophia of the back side.

Treatment Protocole

You need a Mesogun, Mesomega, to do the injection precisely and with a minimum pain for the patient, set on Continuous mode at 3ml/mn.

One session per month during three month with

Hyaluronic acid only or with mixture of HA and vitamins, after these sessions the treatment for maintenance will be done every two to three months according to the result obtained.

Bio stimulation by Hyaluronic Acid

Products available at present :

Hyaluronic acid only non reticulated
IAL SYSTEM
JUVELIFT
ACHYAL

But also kits such as
MACDERMOL
Cocktails to prepare before injection
ACHYAL + NCTF

Products available in ASIA :

Hyaluronic acid
NCTF 135 or CRP 1000
COLLAPRO
ROACTIN

IAL System

HYALURONIC ACID non reticulated, available in ready to use syringe of 1 or 0.5ml
Doctor Marthan

Juvelift

Non reticulated hyaluronic acid

ACHYAL

Hyaluronic acid non reticulated available in ready to use syringe of 2.5 ml

Bio stimulation kit

MAC DERMOL KIT

1 flask of Hyaluronic acid lyophilised
1 flask of vitamins

Achyal + NCTF 135

Hyaluronic acid non reticulated + Vitamins, mineral salts, co enzymes, amine acids

Skin ageing

Photo induction and age related:

Ages spots
Wrinkles
Dermal atrophia
Loss of elasticity
Skin loosening and collapse

Proposing a treatment

Do not offer what is IMPOSSIBLE...

Proposing a treatment

Hydrating properties and fibroblasts stimulation as well the dermo epidermal “filling” of this product are well known. That leads to a very logical way to propose “epidermal floading” of a non reticulated hyaluronic acid strictly in intra epidermal

Epidermal injection in an area non-vascularised will lead to a very slow resorbing and increase its action in the “water reservoir” into the extra cellular matrix.

The Hyaluronic Acid used alone, all over the face, neck, the décolleté, and back of the hands.

1ml, consents to treat the face or the neck, décolleté need additional quantity of product

The use of other elements of bio stimulation (like vitamins) will allow to better and prolonge in time the results obtain with the hyaluronic acid alone.

Proposing a treatment

The results are rapidly visible and lasting one week after the injection of hyaluronic acid +NCTF.

Protocol

Make up remover
Disinfect deeply with Bispetine
To be done within three minutes before treatment (it is the necessary time to remove cutaneous bacteria)

The Equipment

One syringe of 1ml of Hyaluronic Acid or of cocktail HA + vitamins, together with a 30 G, 13 mm syringe, bent at 30o to have a better hand holding and to remain parallel to the skin, that allows you to make intra dermal easily

The Technique

IMPORTANT: hold and tense firmly the skin in the opposite side of injection to
facilitate needle penetration (1mm more than the bevel that needs to be set up)

ID Strictly, papules of 1 to 3 mm of diameter in parallel lines distant of 0.5 to 1 cm.
Between each point:
0.5 to 1 cm
0.5 cm for the thin skin area with papules that are not deeper than 2 mm

To perform the treatment you need to be in front of the region that you are treating.
So that you feel comfortable to do the injections.

Injection and pain
Nowadays we have a cream ANESTOP (distributed by Centrale des Peeling).
You can use it on the entire area of treatment, and need to put a layer approximately fifteen minutes before the session.
This cream works without occlusion.

Injection and pain
In addition to the cream you have to change needle often during injection. In general every 30 to 40 punctures.
Tense the skin firmly of the area to receive injection that result in a less painfull injection and make easier strict ID (small resilience to injection)

Aspect of the area treated
Treatment of the neck and decollete 24 hours after, the visible papule will totally disapear at the 4th day (Hyaluronic acid)
Other products of the kit give also papules that disapear totally the next day of the injection

Treatment with bio stimulation kits
For Instance with Mac Dermol
The mixture with solution of vitamins and Hyaluronic Acid lyophilised must be prepared 24 hours before, you add to this mixture 2cc of saline solution at 9/1000, total quantity 8cc and can kept as such over two months in the fridge.
At each session the treatment is done with the quantity of the product necessary to cover the area you have to treat.
Generally one session per month during three months, then 3 sessions per year after the first treatments

Treatment with Achyal and NCTF
You need to inject in the Flask of NCTF (5ml) one syringe of 2,5ml Achyal, that makes 7,5ml of mixture that you will take in one ml syringes and inject the necessary quantity to cover the treatment area.

Same protocol of treatment as Hyaluronic acid alone, or Mac Dermol kit.

Complication and solution
The major complication of the treatment, if you consider also allergy that can happen, are small hematoma that you can reduce easily using a cream formulated with vitamin K

Evolution and results
Improve skin glow and skin toning after the first month, maintain and improve the skin aspect the more you go through the session programmed.
Patients “see” by themselves when a treatment is needed again

Additional treatments
After the first month, you can add some glycolic superficial peelings (50 to 70%) as well as TCA peeling according to the skin status.

A glycolic peel every fortnight, in between bio revitalisation, then every month up to obtain patient satisfaction.

Conclusion
Easy treatment, relatively low cost, not dangerous (exception to rare allergy to Hyaluronic acid)
Easy to perform, if the indication is well observed, and technique is correctly follow. Although, this requires to practice before getting confident.

Montpellier, 3rd October 2004