MesoBotox involves injecting multiple small doses of Botox into the skin of the face to reduce the action of sweat and sebaceous glands as well as the superficial layer of facial muscles.

The main objective of MesoBotox is to relax the orbicular muscles to cause the reopening of orifices. The net effect of MesoBotox is improved sheen of the face with smooth skin, tighter pores and yet the ability to move all the deeper muscles of the face thus retaining a natural, non “plastic” appearance.

AESTHETIC RATIONALE FOR MESOBOTOX

1. Movement:
Complete facial paralysis by Botulinum Toxin is not aesthetically desirable by patients. The preservation of a certain degree of facial mobility is of more aesthetic worth than total lack of movement. Expression and motion of the face is part of beauty and symbolizes life…On the contrary, paralysis is rather a characteristic of death, since a dead person’s face is almost completely smooth. The face lacks all the expressions (pain, suffering, sadness…) that show the individual’s personal experience.

2. Overall Appearance of Face:
Determined by, e.g., the bone structure that usually acts as a tensing structure (like the pole of a tent) for muscles; or by depressed areas like the dark rings under the eyes where botulinum toxin should never be injected. Consequently, the facial bone morphology needs to be carefully assessed when performing “mesobotox”. One of the consequences of aging in humans is that natural body openings progressively close. At a facial level, it is very common to see this effect in the eye and mouth. The main objective of botox, and particularly of mesobotox, is to relax the good muscles (orbicular muscles) to cause the reopening of orifices. This results in a revitalized, glowing face.

3. Increased Aestheticism:
“Beauty is what others see. Hence, “MesoBotox” seeks to preserve natural beauty. The MesoBotox technique “preserves what is natural”, according to the patient’s understanding of the term. MesoBotox is about achieving beauty, but with no traces of Botulinum Toxin ever being used!” B Hertogz

INJECTION TECHNIQUE

1. Cleansing of facial skin with an appropriate solution.

2. Careful and detailed visual assessment of the patient’s face:
A detailed facial assessment is done by both visual assessment and palpation of muscles to determine the patient’s muscle mass in relation to the underlying bone structure. To assess muscle functioning, the patient should be asked to make many forced facial gestures and expressions that highlight muscle functioning and show the degree of muscle interrelation.

Patients should be asked to make a minimum of 5 different movements:

   a) Closing of the eyes as tight as possible;
   b) Eye opening to the maximum while raising the eyebrows: this is a key movement that shows whether the eyebrows have a tendency to rise excessively, thus preventing the unwanted “mephisto” effect.
   c) Frowning;
   d) Puckering the lips forwards, as in a forced kiss;
   e) Curving the corners of the mouth upwards, as in an exaggerated smile.

3. Accurate Assessment of Appropriate Application
A surgical marking pen should be used to mark all areas of interest. “Excess” areas should be identified with dots or small circles. “Depressed” areas, wrinkles and lines should be identified with dashes or “line shadowing”.

The technique for Botulinum Toxin injection follows the Mesotherapy injection principles. Intradermal injections should be administered into the medial dermis so as to form a dermal papule that will allow diffusion. If injections are too superficial, papules will turn into vesicles and the injected drugs will remain at a superficial dermal level with virtually no underlying effect.
**MesoBotox Protocol #1**

There are several toxin dilutions that can be used depending on its intended use.

*Choose either one of the following formulas.*

**FORMULA 1 - High Concentration**
- 100U Botulinum Toxin
- 1ml Physiological Saline

**FORMULA 2 - Standard Concentration:**
- 100U Botulinum Toxin
- 5ml Physiological Saline
- 0.15ml Xylocaine 2% with adrenaline

**FORMULA 3 - Diluted Botulinum Toxin**
- 100U Botulinum Toxin
- 7ml Physiological Saline
- 0.2ml Xylocaine 2% with adrenaline

**FORMULA 4 - Highly-Diluted Botulinum Toxin:**
*Used in microinjections into enlarged pores in nose and chin*
- 100U Botulinum Toxin
- 1ml Physiological Saline

**FORMULA 5 - “Mesolift and Botox” Combination:**
- 10IU Botulinum Toxin - diluted in a 5ml syringe with procaine + vitamin C

**Injection Points:**
As Cl. LeLouarn stated in his article in the “Aesthetic Plastic Surgery” journal, in order to avoid an excessive diffusion, highly concentrated Botulinum Toxin should be used in short and thick muscles, whereas the diluted Botulinum Toxin should be used in flat and thin muscles. To some extent, this is the idea of “MesoBotox”, because the injection of the diluted toxin on a short muscle always implies a certain degree of inaccuracy and, consequently, uncertain results. On the contrary, a greater and inaccurate diffusion of the product is preferred in flat muscles.