Abstract

Aging of the face is a multifactorial process difficult to approach with usual therapies. Poly-Biorevitalization + free HA (NCTF 135 HA) and meso-Abo-BoNT-A (Azzalure/ Dysport) are innovative non-surgical cosmetic procedures designed to rejuvenate the skin and improve its texture, tone, and overall appearance. This case report presents the treatment journey of a 57-year-old female patient, smoker, seeking to address fine lines, uneven skin texture, and reduced skin elasticity using these techniques. It is based on the 20 years of experience of the author using this synergy.

Keywords: Poly-HA-Biorevitalization, mesoAboBoNT-A, microBoNT-A, NCTF 135 HA, Azzalure, Dysport, Mesodysport, skin texture

Introduction

Passing life, time leaves its indelible marks on every living being, and our skin is no exception. Skin aging undergoes multiple changes, including loss of elasticity, decreased collagen production, volume loss, dynamic wrinkles caused by muscle contractions. But also, excessive sweating, open-pores, dyskeratosis and increase of superficial telangiectasias can increase facial aging. Over these, extrinsic factors like smoke can increase skin aging.

The Poly-HA-Biorevitalization with multiple selected ingredients and Free HA (NCTF 135 HA) addresses many of these various aspects simultaneously [2,3,4], restoring elastine, collagen and hydration. AboBoNT-A (Azzalure/Dysport) is very effective in the reduction of acetylcholine release. Meso-Abo-botulinumtoxinA targets particular very superficial dynamic wrinkles and other superficial targets as sweating glands, hair muscle and the very superficial insertion of mimetic muscles in dermal network. All these targets are acetil-coline related and answer very well to injections of AboBoNT-A.

The Author uses this combination of Poly-HA-biorevitalizer (PHaB) and Meso-Abo-botulinumtoxinA (MABA) from many years, confirming with his experience its safety but especially their synergistical action. Poly-HA-Biorevitalizer provides immediate elasticity, hydration and stimulate collagen production [3,4], while MesobotulinumtoxinA, often referred to as "microbotox" or "mesobotox," is a relatively newer concept to target superficial structures of the skin acetylcholine-sensitive [6]. It provides a subtle muscle-relaxing effect that complements the overall rejuvenation. Together, they can achieve a more natural and harmonious result compared to using either treatment alone [5].

Assessment and Treatment Plan: A 57 years Caucasian lady was assessed pre-treatment: she is smoker, and showed signs of early skin aging, including fine lines around the eyes and mouth, mild skin laxity, and visible pores. After a thorough
consultation and examination, it was decided that Poly-biorevitalization HA and meso-abo-bont-a could be an effective solution to achieve her desired results.

**Preparation of poly-HA-biorevitalization (+ freeHA) and Meso-Abo-BoNT-A for treatment.**

The patient was asked to come 20 minutes before treatment without makeup and well cleansed. An informed consent for bio-HA-biorevitalization and meso-AboBoNT-A has been signed (Off Label technique). Pictures before procedure have been done in frontal, 45° and profile both sides. Over this a macrophotography of ala nasi and nearby tissues has been done.

![Figure 2: In (a) it’s possible to see the syringe ready for use with nano-soft needle. A luer lock syringe would be better but missing it a normal syringe was used. In (b) the papules done with nano-soft needle are visible. To be sure that they remain at the basal membrane makes the doctor very safe to avoid diffusion in deeper mimetic muscles (DL especially).](image1)

Face neck and décolleté were thoroughly disinfected to remove anyway makeup and face was divided in upper and lower face with a line from tragus to ala nasi. No numbing cream is used since the treatment is quite painless.

![Figure 3: The technique of poli-HA-Biorevitalization with meso-Abo-BoNT-A is visible in this picture. It’s important avoid pushing too much and rotate the syringe a bit downward while injecting, to let the very fine needles get free to release the active principle at exactly the basal membrane.](image2)

1 vial poly-HA-Biorevitalizer (NCTF 135 Ha), 3 ml is divided into 3 insulin syringes 1 ml each. The luer-lock syringe is better otherwise the normal lock is acceptable. The medical device nanosoft needle (Fillmed France) is used all over the face for all injections [1].

The first syringe 1 ml, without AboBoNT-A, was used to inject the upper face with a micro papule technique. Micro papules at the basal membrane (Nanosoft needle, 3 little needles 0,06 mm long, allows this very superficial injection) are distributed all over the forehead, upper and lower eyelids, periocular and malar zygomatic area, around 1 cm apart [1].

AboBoNT-A (Azzalure 125U) was then diluted with 0,63 ml normal saline, (on label). In each of the remaining 2 syringes of NCTF 135 HA, 1 ml each, 10 units AboBoNT-A, (0,05 ml) aspirated with a BD 0,3 ml syringe, are added x single syringe through the cone without needle. Nanosoft is then applied and after short kind hand mixing, these 2 syringes have been used to inject perioral, cheeks neck and décolleté.

![Figure 4: The picture is after 2 months. The improvement on cheeks wrinkles and the neck was evident and the patient so happy! came back then for the full protocol.](image3)

The same micro papules technique was used in lower face, perioral, neck and décolleté remaining always very superficial using the nanosoft needle and without injecting too much liquid, less than 0,02-0,03 ml, a very little papule, but perfectly visible. The blue line of nanosoft needle must be strictly upward. Better avoid pushing too much. The injection with this medical device arrives exactly to the basal membrane.

These papules disappear in few hours. The patient was again disinfected and came back immediately to work. No complications have been reported. The patient was asked to come back 1 week later and 2 months later to check results and do pictures after procedure and rate the results from 1 to 5 (1 no results-5 great results)

**Results**

No complications have been reported. The patient seen 1 week after and after 2 months was very satisfied of treatment rating it 5. The pictures after 2 months presented a good result with...
The pictures before and after demonstrate the results on skin texture.

**Discussion**

Poly-HA-Biorevitalization with mesoaboBoNT-A typically involves injecting a combination of hyaluronic acid and botulinum toxin into the skin to improve its texture, elasticity, and overall appearance. From a safe point of view this patient did not have any bruise or other complication. She was very happy and enjoyed a lot the results.

The poly-HA-Biorevitalizer addresses its results especially at the basal membrane and the nano soft needle allowed to stay exactly at this level. This allowed to eliminate contemporary side effects like bruises especially in the periocular area, but also in the lower third with meso BoNT-a, to eliminate diffusion to deeper mimetic muscles. In the experience of the Author, in this patient, but also in all other patients previously treated with this technique, the diffusion to deep layers was totally absent and never patients complained about post treatment asymmetries. These asymmetries can be possible in the lower lip, for diffusion to Depressor Labii (DL) and in lateral cheeks where risorius muscle is very superficial passing over the masseter muscle and inserting at the parotid fascia. The nanosoft needle makes the difference especially in an unexperienced hand. Using a normal needle, diffusion to lower muscles, anyway very superficial, remains possible.

The indication as always in aesthetic medicine is crucial to get good results. This patient, smoker, was not too aged, had mimetic problems in the lower third, perioral and cheeks but not so important. Also, hydration and skin texture were not too reduced. Skin laxity was present but again not too important. So finally, this kind of patients are the best indication for this synergistic technique. These results have been recorded after only 1 session, but must underlined that normally this procedure is inserted in a program of 5 session 15 to 30 days apart. In only 1 of these sessions is used meso-AboBoNT-A.

**Conclusion**

Combining Poly-HA-biorevitalization (PHAβ) and Meso Abo-BotulinumtoxinA (MABA) addresses good improvement in some of aging signs: PHAβ stimulates natural collagen and elastin production, leading to prolonged benefits in terms of skin quality and texture. MABA reduces mimicity in a difficult area to be treated with standard BoNT-a. Nanosoft needle in the opinion of the author is crucial to eliminate adverse events sometimes raising in this area. MABA is also able to reduce sweating, reduce pore size and generally improve superficial skin texture. After long experience it is confirmed that dilution of AboBoNT-A in NCTF 135HA is safe, maintains the same effectiveness of the 2 products alone. results seem to be better then using products alone but It would be very interesting assess the better synergistic results through blind split face studies.

Having a quick recovery period, downtime is minimal, allowing patients to return to their daily activities immediately. Using nanosoft needle also bruises are really very rare and minimal.

In conclusion, the combination of Poly-HA-biorevitalization and Meso Abo-BotulinumtoxinA in very superficial skin layers offers a comprehensive and customized approach to facial rejuvenation. This combination takes advantage of the unique properties of each treatment to achieve natural-looking results and addresses multiple aspects of aging skin. The interesting results obtained by the Author suggest further studies to confirm with larger numbers future directions for more important researches especially by the companies involved in this case report.

The author is KOL and trainer for Fillmed, Ipsen. The Author did not receive any honoraria for this scientifical article based on personal own experience.

**References**