

VISCODERM® 2% maxx

Natural HA for facial volume and skin tone

Alessandro Gennai and Luigi Izzo discuss the use of a pure, natural hyaluronic acid for full facial rejuvenation, while also enhancing volume and overall skin tone.



DR. ALESSANDRO GENNAI and **DR. LUIGI IZZO** are Aesthetic Plastic Surgeons with a private practice in Bologna, Italy, focusing on facial rejuvenation by Aesthetic Medicine and surgery. They are members of Italian Society of Plastic Reconstructive and Aesthetic Surgery.

Contact information:
info@gennaichirurgia.it

FACIAL AGEING RESULTS in volume loss as a result of subcutaneous fat and bone reabsorption. Structural support fails and tissues glide downward. In addition, skin ageing is accelerated by sun exposure, cigarette smoking and other lifestyle habits, all of which negatively affect the skin, resulting in aged skin with lost hydration, tone, and elasticity, and leading to wrinkle formation and opaque skin.

Therefore, restoring lost facial volume and skin hydration become our main goals in facial rejuvenation. The authors use hyaluronic acid (HA), a physiological macromolecule of the dermis, which presents a high capacity of binding water molecules, simultaneously improving volume and water content of the tissues. It is degraded by the action of the hyaluronidase enzymes, over a variable period of time, depending on genetics, lifestyle and other factors.

Preferences and techniques

The preferred HA of the authors is of a 'pure' rather than cross-linked formulation: 20mg/ml in a buffered

saline solution. Viscoderm® MAXX (IBSA Farmaceutici Italia) offers this formulation in a 2.5ml sterile pre-filled syringe to supply the physician with enough volume to treat extended areas of the face. We strongly believe that this formulation has the advantage of a higher water binding capacity, restoring skin hydration, and is able to stimulate fibroblast activity, enhancing the production of collagen.

“Pure hyaluronic acid allows the physician to inject greater amounts, without incurring any adverse effects.”


Furthermore, pure HA allows the physician to inject greater amounts, without incurring any adverse effects (most notably, swelling). The absence of swelling and other significant adverse reactions allows us to inject HA in every facial region (*Figure 1*), without fear of patient complaints or unnatural outcomes. On the other hand, however, cross-linking acts as a shield against hyaluronidase enzymes, so injecting pure HA results a lesser survival duration than cross-linked HAs.

The technique and injection depth varies according to the areas to be treated. A 27G fine needle 19mm long is our most frequent choice—it allows us to reach any tissue depth and to reduce the force needed to inject the HA. In some cases we

prefer injecting using a 27G blunt cannula 40mm long, in order to maximise the surface area of HA injected in the tissues, especially in thinner areas.

Conclusions

A young face is a full face with light skin, whereas an aged face shows flattened facial contours and a flaccid, opaque skin. Volume restoration creates the convexities and fullness of a young face. Fibroblast stimulation and therefore collagen production (the biostructuring effect of HA), improves skin tone, enhances hydration and reduces wrinkles, giving a younger appearance to the skin.

HA is a safe, non-invasive and fast method to sculpt facial contours, and pure HA hydrates tissues and contributes to a more even skin tone. HA gives an excellent structural support and acts as a stimulus for fibroblasts to re-structure the skin by enhancing collagen deposition. The 2.5ml Viscoderm® MAXX formulation provides the physician with all the volume needed to simultaneously improve facial contours and skin tone. 

References

1. Rohrich RJ, Pessa JE. The fat compartments of the face: anatomy and clinical implications for cosmetic surgery. *Plast Reconstr Surg* 2007; 19(7): 2219-27
2. Shaw RB Jr, Katzel EB, Koltz PF et al. Aging of the facial skeleton: aesthetic implications and rejuvenation strategies. *Plast Reconstr Surg* 2011; 127(1): 374-83
3. Gennai A. *Endochirurgia Estetica del Volto*. Florence: SEE, 2011





Figure 1 Restoring lost facial volume and skin hydration using Viscoderm® MAXX. (A) Before and (B) after treatment

For further information visit www.viscoderm.com



Periocular region

A 27 G blunt cannula, 4 cm long, was used to minimise ecchymosis and guide the injection to the correct plane. In recreating the salience and the fullness of the brow area, the implant is placed in the submuscular plane, in linear extraction. In the superficial skin layers, we prefer a microbolus technique, to reduce implant visibility. The amount injected is 1-1.5 cc per side on the brow and upper orbital arch; 0.5 cc in the inferior orbital arch.

Cheek In this area there is less need to recreate volume and salience, and more need to restore skin tone. HA is injected using a blunt cannula 27 G in the subdermal plane, aiming to create a 'carpet' of HA. The amount injected is 1 cc per side.

Malar/zygomatic zone

We use a 27 G needle, injecting 1.5-2 cc per side, with a combined technique: a bolus technique, with multiple injection sites, placing the HA in the deep layer, creating 'pillars' of HA. Boluses provide enough structural support to superficial tissues and, at the same time, expose less surface of HA to the hyaluronidases. A linear technique is used to inject HA into the deep dermis, maximising HA deposit into the skin, taking advantage of its fibroblast-stimulating capabilities.

Marionette lines

Using a 27 G needle and a linear extraction technique, we inject the HA into the deep dermis in order to enhance skin hydration, tone and collagen deposition. The amount injected is 0.5-1 cc per side.

Chin Restoring chin volume is important in order to improve the definition of the cervical angle. We use a 27 G needle to perform bolus injections in the midpoint of the chin, increasing projection and defining the angle.