

HYALURONIC ACID LIP FILLERS: CLINICAL CASE PRESENTATION

Carine Campos¹
Mirna Liz da Cruz²
Orlando Aguirre Guedes³

ABSTRACT

Lip filling with hyaluronic acid (HA) is a minimally invasive alternative for treating lip aging, offering increased volume and definition. A case study reported the experience of a 43-year-old patient who, dissatisfied with her lack of lip volume, underwent volume using Renova brand HA.

Keywords: Lip filling; hyaluronic acid; facial harmonization

INTRODUCTION

Lips become thinner and less defined with aging due to the gradual loss of collagen and elastin. Historically, this effect of aging was addressed by surgical lifting procedures, but today, the injection of hyaluronic acid (HA) fillers is becoming increasingly popular as a minimally invasive option (Hilton et al, 2018).

Among non-surgical regenerative and reconstructive procedures, hyaluronic acid (HA)-based dermal fillers are one of the most frequently used treatments. Their advantages over other filling materials include their natural occurrence, which provides non-immunogenic properties. They also exert an antioxidant effect and anti-inflammatory activity. In addition, HA strongly supports tissue regeneration and wound healing by providing a suitable structure for cell growth. Due to its multiple

¹Carine Campos, specialist in Orofacial Harmonization, Universo Goiânia University Center, carine.campos@go.universo.edu.br

²Mirna Liz da Cruz, specialist in Orthodontics and Facial Orthopedics, Goiânia University Center, mirnaodonto@gmail.com

³ Orlando Aguirre Guedes PhD in Health Sciences from the Faculty of Medicine, Federal University of Goiás, Professor at UniEvangélica

advantageous properties, HA is also widely used in other areas of tissue regeneration, such as orthopedics to treat osteoarthritis and rheumatoid arthritis. In addition, it is used in ophthalmology, dermatology, as well as in certain dental procedures (Czumbel et al, 2021).

The overall goal of lip and perioral augmentation and aesthetic treatment should be a natural improvement in 3D lip volume with a well-defined red border and improved texture, without compromising naturalness (Nikolis et al, 2021). The red borders of both lips are safe for superficial injection of fillers. For the filler injection site, the middle of the lip is used to avoid injection between the muscle layer and the mucosa (Walker et al, 2021) (Cotofana et al, 2017).

MATERIALS AND METHODS

This study presents a clinical case performed in a private lip filling clinic using hyaluronic acid.

RESULTS

The results obtained show an increase in lip volume with a natural 3D improvement and a well-defined red border and improved texture, without compromising the naturalness of facial expressions, which met the patient's expectations.

CASE REPORT

Patient G.S., female, 43 years old, complained of having little lip volume and feeling uncomfortable with their appearance. She presented a normal general clinical condition, and her medical history was normal. After clinical and photographic analysis, lip augmentation was planned.

The procedures began with the removal of makeup and other products with micellar water. The patient's face was cleaned with 70% alcohol. The patient was then instructed to rinse her mouth with Perioplak for 2 minutes. After cleaning, the procedure continued by marking the areas to be filled. Anesthesia was administered with Mepivacaine using a carpule syringe and a short 30g needle. The equivalent of

slightly less than $\frac{1}{4}$ of the tube of anesthetic was administered to each of the emerging infraorbital and mental nerve endings, and the remainder was used to anesthetize the buccal nerves bilaterally. After 15 minutes, the filling process began. Using a syringe of Renova hyaluronic acid and retroinjection, the pillars of the lip filter were filled first, followed by the descending part of the cupid's bow, as well as the deep anterior part of the upper lip up to the central tubercle, using a 27g needle for these procedures. Next, a 2 mm incision was made bilaterally with a 25-gauge needle to insert the cannula (Figure 6). Using a 25-gauge cannula, the lip contours were filled using retroinjection, as well as the deep part of the vermilion marked in the drawing, on both the upper and lower lips. Two ml of filler was injected in the first session. After three months, at the follow-up consultation, it was decided to inject another 3 ml to achieve the volume desired by the patient. The results are shown in Figures 1-6.

Figure 1. Initial photo



Source: Clinical case from the office of author Carine Campos

Figure 2. Initial photo of smile



Source: Clinical case from the office of author Carine Campos

Figure 3. Right profile photo after application of 2 ml



Source: Clinical case from the office of author Carine Campos

Figure 4. Left profile photo after application of 2 ml



Source: Clinical case from the office of author Carine Campos

Figure 5. Photo of the 3 ml application session



Source: Clinical case from the office of author Carine Campos

Figure 6. Comparative photo



Source: Clinical case from the office of author Carine Campos

Conclusion

With aging, the upper lip undergoes adipose tissue atrophy, leading to a thinner vermilion border, flattening of the filter, widening of the Cupid's bow, and loss of the natural protrusion of the vermilion and ptosis of the lower lip with age. The patient in this case has been followed up for 1 year and attends the necessary touch-ups every 6 months.

Bibliographic References

Cotofana S, Pretterklieber B, Lucius R, Frank K, Haas M, Schenck TL, Gleiser C, Weyers I, Wedel T, Pretterklieber M. Distribution Pattern of the Superior and Inferior Labial Arteries: Impact for Safe Upper and Lower Lip Augmentation Procedures. *Plast Reconstr Surg*. 2017 May;139(5):1075-1082.

Czumbel LM, Farkasdi S, Gede N, Mikó A, Csupor D, Lukács A, Gaál V, Kiss S, Hegyi P, Varga G. Hyaluronic Acid Is an Effective Dermal Filler for Lip Augmentation: A Meta-Analysis. *Front Surg*. 2021 Aug 6;8:681028.

Di Lorenzo, R.; Ricci, L.; Vardaro, E.; Di Serio, T.; Morelli, E.; Laneri, S. Advancing Lip Augmentation: State-of-the-Art 2D and 3D Analysis for Assessing Volume Enhancement and Lip Line Redefinition. *Cosmetics* **2024**, *11*, 70.

Hilton, Said MD; Sattler, Gerhard MD; Berg, Anna-Karin PhD; Samuelson, Ulf MD, PhD; Wong, Cindy MBBS (Hons), FRACP, FRCPA. Randomized, Evaluator-Blinded Study Comparing Safety and Effect of Two Hyaluronic Acid Gels for Lip Enhancement. *Dermatologic Surgery* 44(2):p 261-269, February 2018.