

The Effectiveness of the 3M Technique in Improving Retrognathic Patient Profiles Isabela Pareja Guerra GREEHOF - ESCOLA BEL GUERRA



INTRODUCTION

The human face is a complex interplay of various features, each contributing to an individual's unique appearance and identity.

In aesthetic and functional dentistry, attaining facial harmony stands as a fundamental pursuit. The alignment of the chin, maxilla, and lower jaw significantly influences facial appeal. Retrognathism, characterized by a posterior lower jaw position, disrupts facial harmony. Introducing the 3M Technique, an approach involving strategic facial filling in the malar, chin, and jaw areas.

By skillfully manipulating shadow and light, this technique promotes facial equilibrium, leading to an aesthetically enhanced and elongated appearance. This method offers a non-surgical alternative to improve facial proportions and address age-related tissue shifts.

CASE DESCRIPTION

A 33-year-old female patient expressed discontent with her retrognathic profile, although lacking occlusal dysfunction that would warrant orthognathic surgery. The patient exhibited facial proportion imbalance across the upper, middle, and lower thirds. Her chin was notably posterior to the E-line, named by the orthodontist Dr. Ricketts, connecting the nose, lip, and chin. Additionally, tissue sagging, double chin and fat pad repositioning due to aging prompted the need for tissue restructuring.

Treatment Approach:

Given the absence of surgical indications, the 3M Technique was employed, incorporating HarmonyCa® alongside hyaluronic acid fillers. This strategic combination was administered to restore facial harmony and efficiently address tissue alterations:







Image 1 - Injected Areas and Case Planning Diagram. a) Lateral View Highlighting Jaw Planning and Chin Projection; b) Frontal View Emphasizing Chin and Maxilla Planning; c) Profile View, Spotlighting Planning for the Zygomatic Region.

• Malar Region and Zygomatic Arch: The HarmonyCa® filler was chosen to address both support and sagging concerns in the Malar region and zygomatic area. In the subcutaneous plane, an injection of 0.2 ml of the product was administered in three different area. This was followed by four retroinjections connecting these small injections.

Mandibular Region:

HarmonyCa[®], containing calcium hydroxyapatite for collagen stimulation and support, was selected for the mandibular region.

Chin

Restylane Lyft® was used in the supraperiosteal layer, combined with Restylane Defyne ® subcutaneously, achieving volume restoration in the chin region.



Scan the QR code to watch the video of the procedure being performed.

RESULTS

After treatment, the patient's facial profile exhibited notable improvement. The once retrognathic appearance was replaced with balanced proportions, aligning the chin with the midfacial landmarks. The soft tissue changes were effectively addressed through precise filler placement, restoring youthful contours between face and neck and enhancing facial aesthetics.



Image 2- Left profile: Before and Right After: Illustrating Facial Harmony, Tissue Repositioning, Enhanced Facial Contour, Chin projection.



Image 3 - right profile: Before and Right After: Illustrating Facial Harmony, Tissue Repositioning, Enhanced Facial Contour, Chin

The harmony between the chin and lower jaw holds significant importance in determining facial aesthetics, functional occlusion, and overall psychological well-being. Retrognathic patients often face challenges related to both appearance and function, affecting their quality of life.

The 3M Technique presents a compelling alternative for patients with retrognathic profiles who lack surgical indications by restoring facial balance and optimizing the interplay between soft tissues and dental occlusion. Through the strategic application of hyaluronic acid fillers and collagen-stimulating agents, the technique effectively improves facial harmony, proportions, and soft tissue changes associated with aging. This approach aligns with modern trends towards minimally invasive interventions that achieve impactful outcomes.

CONCLUSION

The 3M Technique demonstrates its effectiveness in transforming retrognathic patient profiles. By addressing facial proportion imbalance and soft tissue changes, this non-surgical approach enhances both aesthetics and patient satisfaction. As an illustration of the interplay between aesthetic and scientific innovation, the 3M Technique stands as a promising avenue for improving facial aesthetics and quality of life.

REFERECES

- Smile makeover and the oral facial harmony concept in a new era: relationship between tooth shape and face configuration. Giuseppe Romeo. Int J Esthet Dent. 2021 May 10;16(2):202-215.
- Parker JJ. Calcium Hydroxylapatite Soft Tissue Fillers: Expert Treatment Techniques. Skinmed. 2022 Dec 20;20(6):480. PMID: 36537691.Parker JJ. Calcium Hydroxylapatite Soft Tissue Fillers: Expert Treatment Techniques. Skinmed. 2022 Dec 20;20(6):480. PMID: 36537691.