

INTRODUCTION

As a rare condition, idiopathic hypertrophy of the masseter muscle can be described as a unilateral or bilateral enlargement of the muscle, the etiology of which is unknown. However, it is often associated with unilateral masticatory activity, dental malocclusion, temporomandibular joint dysfunction, bruxism, or, in some cases, presented as a congenital pathology. Its diagnosis is mainly based on clinical presentation but can be supported with imaging tests. Though often asymptomatic, its impact on the patient's aesthetics cannot be denied. It may represent significant facial asymmetry, potentially leading to psychological issues, affecting a prominent area of the body. In this scenario, an increasing number of patients are opting for non-surgical or minimally invasive options, like the therapy of botulinum toxin type A injection which, when injected directly into the muscle, helps reduce its contractions.

CASE REPORT

A 34-year-old female patient was admitted for clinical evaluation with the primary complaint of asymmetry in the lower third of the face, without painful symptoms. For accurate diagnosis and treatment, an occlusal examination was requested, as well as a computed tomography scan that showed, respectively, no occlusal changes that could favor the pathological process, and bone symmetry in the jaw with increased volume in the left masseter muscle (Image 1). This can be explained because, although facial symmetry mainly depends on skeletal tissues, soft tissues construct the facial contours and ultimately determine facial symmetry.



Image 1 – Diagnostic images of occlusal exam and computed tomography

The proposed treatment was carried out in two stages, with intervals between sessions, combining a neuromodulator and hyaluronic acid, to improve facial proportions, thus reducing asymmetries. Botulinum toxin type A (TxB A) Dysport (Ipsen Limited, England) was applied to the left masseter for muscle atrophy at two 5sU points and a central 7sU point. Then, for volumization of the right side of the face, Restylane Lyft and Volyme (Galderma, Uppsala, Sweden) were used respectively, with a 27G needle at just bone bolus points for support (5ml) and retroinjections with a 22G cannula in the subcutaneous tissue (2ml). In the second session held after 17 days, a second application of HA with 2ml of Restylane Volyme was performed for refinement. A standardized photographic protocol was followed to document the results obtained from the therapeutic approach. All treatment stages were closely monitored using Quantificare LifeViz for comprehensive analysis.

RESULTS

Immediately after the procedure, as can be seen in Image 2, there was an increase in volume on the right side of the face, which corroborated achieving a satisfactory final result (Image 3 and 4) after 6 months, where the neuromodulator was relaxing the masseter muscle, allowing a volume reduction on the left side. Additionally, hyaluronic acid was able to provide volumization on the right side of the face, giving the patient a more harmonious appearance, with more regular symmetry observed..

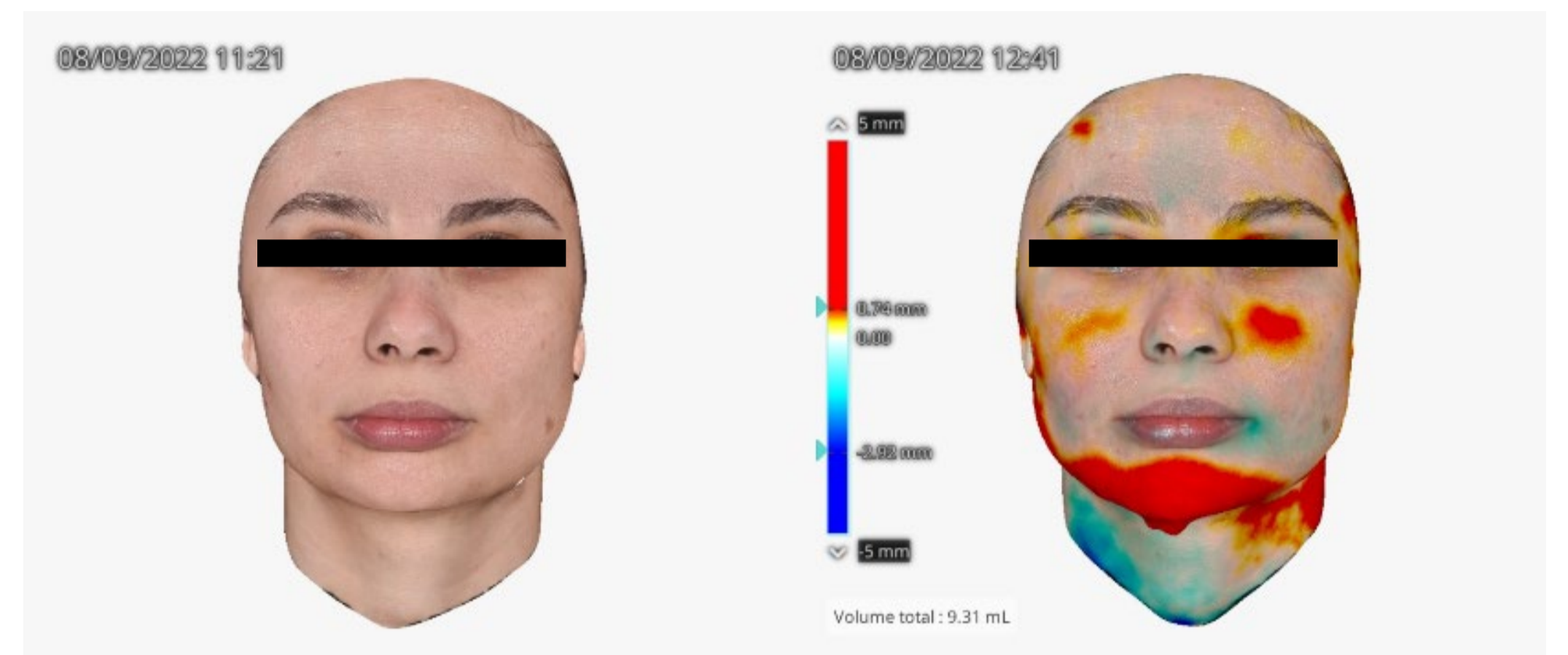


Image 2 – Frontal picture of the patient, evidencing areas where there was an increase in volume, immediately after the procedure.



Image 3 – Frontal picture of the patient, before the procedure and 6 months after the procedure.

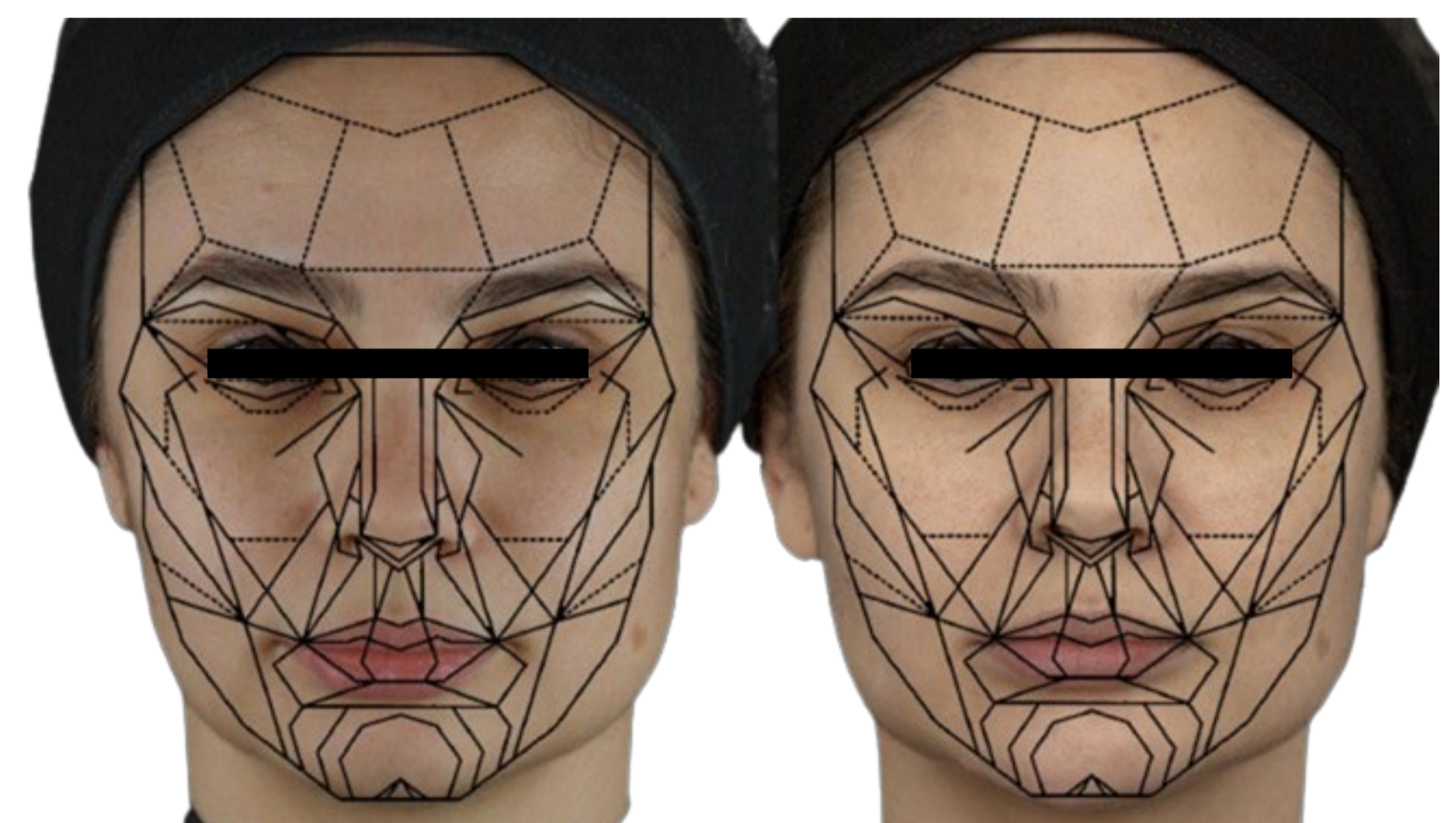


Image 4 – Frontal picture of the patient, before the procedure and 6 months after the procedure, evidencing with the Pi diagram.

CONCLUSION

Facial aesthetic treatments significantly influence the individual and their life perception, especially regarding facial symmetry, as it's deemed crucial for perceived facial attractiveness. From this, it's essential that before planning the patient's treatment, the diagnosis is confirmed and cannot be based solely on clinical findings to avoid undesired outcomes. Proper analysis requires medical history and physical examination, and the inclusion of supplementary imaging tests, like computed tomography, was crucial for the correct diagnosis in this case.

REFERENCES

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