

Possible Late Complications due to Lip Filling: Tooth Movement

Danilo Lourenço¹ and Irineu Gregnanin Pedron^{2*}

¹Professor, Department of Orthodontics and Gerodontology, Universidade Brasil, São Paulo, Brazil

²Professor, Department of Periodontology, Implantology, Stomatology, Integrated Clinic, Laser and Therapeutics, Universidade Brasil, São Paulo, Brazil

***Corresponding Author:** Irineu Gregnanin Pedron, Professor, Department of Periodontology, Implantology, Stomatology, Integrated Clinic, Laser and Therapeutics, Universidade Brasil, São Paulo, Brazil.

Received: September 08, 2022; **Published:** November 11, 2022

Aesthetics is currently the main reason for seeking dental treatment. Dental surgeons seek to identify the various factors that compromise facial harmony. Beauty and the perception of what is beautiful, throughout history, has always been understood as a subjective and individual issue, deeply influenced by cultural, racial and ethnic values. The growing symbolism of beauty and the body has a great impact on the quality of life and well-being of each individual, so it should be considered in the broad context of health. The harmonious proportions of the face and other features such as the eyes, nose, lips, chin and neck are paramount to an attractive face [1,2].

The lower third of the face, bounded by the subnasal line and the chin, is especially important for a pleasing facial appearance. By knowing what can alter the profile of the patient, it is possible to prevent undesirable changes as a result of the planned treatment [1,3].

Orofacial harmonization emerges with the exact objective of providing the desired balance, focusing on the harmony between the smile and the face, aiming for high self-esteem, well-being and, consequently, fully restored health. This can integrate treatment plans that combine function, aesthetics and dental health, providing harmony to a face through adjustments in symmetry and balance between facial thirds [3].

The lips have been highlighted as one of the most beautiful regions of the face and are therefore an extremely valued area when it comes to improving facial aesthetics. Over the course of life, sun exposure, hereditary factors and smoking contribute to lip volume loss, perioral wrinkles and prominent nasolabial and mentolabial folds [1].

Currently, we can alter genetically thin or asymmetrical lips through aesthetic treatments using dermal fillers. Lip augmenta-

tion with hyaluronic acid dermal fillers is described as a minimally invasive procedure that has become very popular in recent years. These procedures are being performed in patients of different age groups aiming to provide curves to the lips [1,3].

For an adequate stability of the inclination of the anterior teeth, the balance between lip and tongue must exist. It is correct to consider that the patient uses the tongue to seal the anterior region of the mouth during swallowing, for example, in order to prevent liquids and food from escaping, as well as the lingual interposition occurs during speech or during its own resting postural position. Thus, bringing the lips together and placing the tongue between the anterior teeth is the only way to achieve an anterior seal [1].

There is a growing concern in the last years regarding the use of hyaluronic acid in lip fillings by the dental surgeon. Possible trans and post-application complications such as hypersensitivity reactions; erythematous areas; foreign body reactions (formation of granulomas); infection; pain; necrosis; occlusion of the ophthalmic artery, leading to visual disturbances and blindness, have been reported [4-7]. The use of hyaluronidase in the management of these complications also presents risks due to the biological nature of this drug [8]. Other possible late complications may also occur, such as bone resorption generated by the weight of the lip filler [9]. It is important to emphasize that all these complications may culminate in ethical-judicial issues against dental surgeons [6,10,11].

Doubts now arise from these aesthetic procedures through the use of fillers:

- To what extent can this increased volume in the lips and consequently the weight generated by these fillers alter the positioning of the upper anterior teeth (Figure 1)?

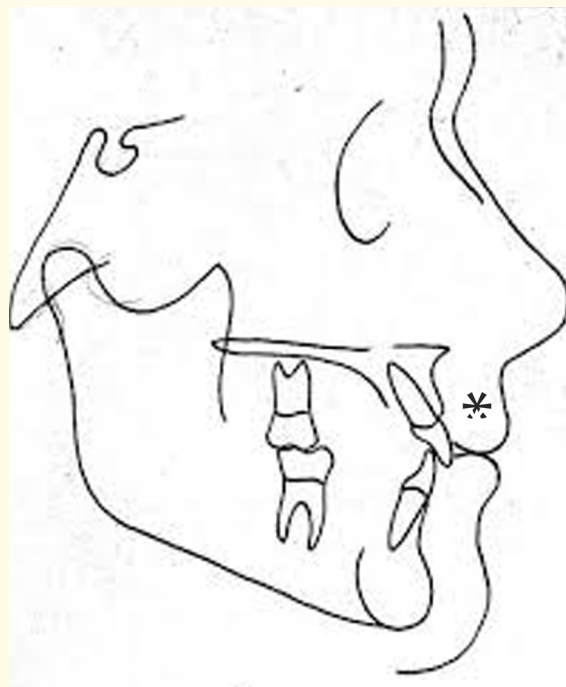


Figure 1: The asterisk on the upper lip indicates the injection site of the hyaluronic acid implying the risk of movement (palatization) of the upper anterior teeth.

- From the moment there is an interference in this binomial, could the teeth suffer some kind of modification in relation to their ideal position?
- Would patients who have already been treated with orthodontics and who have already undergone dental compensation mechanics due to skeletal imbalances be more susceptible to this interference from aesthetic procedures injecting lip volume?
- Should all of these patients then use some type of orthodontic retainer so that there is no risk of future tooth position change?

The demand for these procedures has grown immensely and the role of the dental surgeon is essential throughout the treatment, from the correct assessment of the needs and expectations of the patients, to obtaining a satisfactory result that provides the patient with a harmonious face, combining health and aesthetics, without forgetting the prevention of unwanted effects.

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