



## Facial Feminization In A Patient In Transexuality Process Case Report And Presentation Of Labiogram Variations

<sup>1</sup>Oriental Luiz de Noronha Filho, <sup>2</sup>Brunelly Mariana de Moura Souto, <sup>3</sup>Dayane Cristina Inácio, <sup>4</sup>Afonso Leone Pinto, <sup>5</sup>Talita Ribeiro Ricardo, <sup>6</sup>Ariane Araújo Ferreira de Mello Chagas, <sup>7</sup>Lucas Massote Naves

<sup>1</sup>Oral and maxillofacial surgeon; Specialist in Radiology and Dental Imaging; Specialist in Orofacial Harmonization; Master and Doctor in Public Health. Coordinator and Professor of Orofacial Harmonization (UNIFACVEST – BRAZIL).

<sup>2</sup>Dentist surgeon; Specialist in Orofacial Harmonization (UNIFACVEST – BRAZIL)

<sup>3</sup>Dental Surgeon; Specialist in Implantology; Specialist in Orofacial Harmonization; Specializing in Oral and Maxillofacial Surgery and Traumatology; Professor of the Specialization Course in Orofacial Harmonization (UNIFACVEST – BRAZIL).

<sup>4</sup>Dental Surgeon, Specialist in Orofacial Harmonization; Professor of the Specialization Course in Orofacial Harmonization (UNIFACVEST – BRAZIL).

<sup>5</sup>Dental Surgeon, Specialist in Orthodontics; Specialist in Orofacial Harmonization; Professor of the Specialization Course in Orofacial Harmonization (UNIFACVEST – BRAZIL).

<sup>6</sup>Dental Surgeon, Specialist in Orthodontics; Specialist in Orofacial Harmonization; Professor of the Specialization Course in Orofacial Harmonization (UNIFACVEST – BRAZIL).

<sup>7</sup>Graduating in Dentistry (UNILAVRAS – BRAZIL)

Date of Submission: 28-04-2024

Date of Acceptance: 08-05-2024

### SUMMARY

**Introduction:** Gender identity is understood as the expression of an identity constructed based on how the individual recognizes and/or presents themselves. **Objective:** through a clinical case of orofacial feminization, present techniques and materials for the feminization process in orofacial harmonization, as well as present a labiogram focused on volumization, eversion, contouring, lip hydration and luminosity. **Case report:** Hyaluronic acid-based fillers were performed in the malar region, with a combination of two techniques: MD Codes, with fillers in specific points with a bone base, dense material, with volumizing capacity and in a fan shape, linear retro-injections, producing the “top mold look” effect. Lip filling was performed with a specific material for lips, in mucosa, paying attention to anatomical bases, based on intra-labial compartments and studies of ethnic miscegenation (characteristic of the Brazilian population). **Conclusion:** The transgender public is growing and the professional Specialists in orofacial harmonization must be aware of their role in this process of facial transformation and social redefinition. **Keywords:** Transgender; Facial feminization; Dentistry and Orofacial Harmonization.

### I. INTRODUCTION

The diagnosis of transgender patients was first described and published in 1975 in ICD-9. Such a condition was no longer considered a pathology of Mental Health Illnesses. Only in 2013 did it become considered dysphoria; which is defined as a disorder affecting individuals who have a large difference between their experienced or expressed gender and the gender assigned at birth.<sup>1,2</sup>

Gender identity is understood as the expression of an identity constructed based on how the individual recognizes and/or presents themselves. It may or may not correspond to your biological body and must be differentiated from your sexual orientation, which is linked to the way the person relates sexually and emotionally.<sup>3</sup>

Recent research has shown that the transgender population accounts for around 2% of the total Brazilian population, however the trans community is still identified as the one that encounters the most adversities, barriers and stigmas in accessing healthcare among the population. That is, the provision of health services that should be universal and egalitarian is biased and unfair in the social and economic sphere, with cases of marginalization, discrimination and violence being common.<sup>3,4,5</sup>

The National Health Integration Policy for lesbians, gays, bisexuals, transvestites and



transgender, queers, intersex and asexuals (LGBTQIA+) of Brazil's Unified Health System (SUS) recognizes "gender identity and sexual orientation as social determinants of health due to discrimination and prejudice that can make the LGBTQIA+ community vulnerable."<sup>3,4</sup>

The process of facial feminization is a subset of surgical and non-surgical procedures performed for male to female patients, under the generic term of gender affirmation, which encompasses genital and non-genital (body and facial) procedures<sup>5</sup>. Orofacial harmonization in the transgender process has gained increasing strength in the community as it has been instrumental in alleviating the incongruity suffered by trans individuals due to gender dysphoria.<sup>6,7,8</sup>

Minimally invasive procedures are a set of techniques and active ingredients that aim to treat irregularities in the face and neck, correcting or reducing wrinkles and fine lines, increasing or decreasing volume in different areas of the face, creating support with the aim of reversing and preventing aging, improving symmetry, golden ratio and skin quality.<sup>9</sup>

Facial Feminization aims to bring feminine features to a face, changing masculine facial features to feminine ones. Women generally have softer, rounder facial features. Such procedures aim to give the face a softer, more traditionally feminine appearance. Each patient has a unique need and typical facial feminization procedures include eyebrow lift, nose reshaping, blepharoplasty, malar filler, lip lift, lip filler, Bichectomy and face/neck lift.<sup>10</sup>

The ideal female face has the following characteristics: Large, smooth forehead with some convexity and arched eyebrows.<sup>11</sup> Eyes that appear wide open, proportionally smaller nose, narrow with nasal tip facing upwards.<sup>12</sup> Obtuse nasofrontal angle, obtuse nasolabial angle.<sup>13</sup> Malar prominent, full cheeks and cheekbones.<sup>14</sup> Full lips, especially anteroposterior axis, and rounded, narrow and proportionally short chin.<sup>15</sup>

The female face has prominent upper facial features and a gradual tapering from top to bottom, while the male face has a more square shape, large and angled jaw, with balanced upper and lower facial proportions. Female attractiveness is in the cheekbones, and for men, it's in the chin. Variations in the anatomy of the face of men and women are seen at all levels – from the skin and tissues that provide fat density and volume, to muscles and bone structure; implying aesthetic clinical management in transgender patients.<sup>16,17</sup>

This article sought to present a case report of a patient undergoing gender transition,

describing the facial characteristics worked on at this point in the transition and presenting a labiogram that meets the needs of volumization, eversion, contour and luminosity.

## II. CASE REPORT

Patient D.S.B., 30 years old (Figure 1). Melanoderma, social worker, transsexual, in the transition process for 5 years. Use Topical Estradiol.

Hormone treatment is described as the administration of exogenous endocrine agents to induce changes in the body, reduce levels of endogenous sex hormones, and increase hormone levels consistent with the person's gender identity. In the country, it is recommended for people who have been diagnosed with 'gender incongruity or transgender'. The National List of Essential Medicines (Rename), responsible for identifying available medicines, is a fundamental instrument in the Universal Health System (SUS).<sup>18,19,20</sup>

When the trans person arrives at the office or laboratory where they will begin hormone therapy, it is essential to register them and call them by the social name chosen by them, to avoid them feeling embarrassed, disrespected or made invisible at such an important moment in their journey. of transition.

This right is guaranteed to her by Decree No. 8727 of April 28, 2016, which determines that the Public Administration and its bodies, such as the SUS, must adapt in advance based on a service protocol that promotes respectful reception of transgender people.<sup>21</sup>

She sought out the Face Equilibrium Specialization in Orofacial Harmonization clinic, in the city of Varginha, in the south of Minas Gerais (Brazil); complaining about the face with strong masculine features. She was then informed about the associations of protocols in the Facial Feminization process and guided on the procedures to be carried out for this purpose. After the diagnosis and planning of the clinical case presented to her, she was advised on various possibilities of non-surgical treatments, to benefit her orofacial harmonization, and, in the evaluation, the patient contributed by citing the areas of her greatest aesthetic discomfort.



**Figure 1.** Initial photo. Source: the author

The patient opted for treatment with hyaluronic acid for facial filling and to begin facial contouring care. The treatment plan was established, to which the patient agreed, signing the Free and Informed Consent Form (ICF) and authorizing the use of her images. The interventions began with photographic records, taken with a cell phone, from the beginning until the last consultation, these being in an upright position and with different facial expressions. (Figure 2).



**Figure 2.** Dynamic facial expressions. Source: the author.

As this is a patient in the process of gender transition, strong muscular structure and dynamic expression lines present; we started the protocol with the application of NABOTA® botulinum toxin (Prabotulinum toxin A), a bottle with 100 International Units (IU). They were distributed after dilution in 1 ml of sterile saline, in the frontal region (20 IU), in the orbicularis oculi region (20 IU - with 10 IU for each side) and in the glabellar region, procerus (10 IU), corrugators of the eyebrow (10 IU – 5 IU on each side).

Facial fillers were performed with cross-linked hyaluonic acid from the manufacturer Rennova®, with 4.0 ml of Rennova® Ultra Volume Lido, produced with the innovative Hi-High Molecular Ideal Reticulated Matrix™ technology. Its viscoelastic characteristic guarantees a gel with high volumizing and expansion capacity and 1.25 ml of Rennova® Lips Lido, for projection, volumization, eversion, contouring, lip hydration and luminosity. It is a fully cross-linked filler.

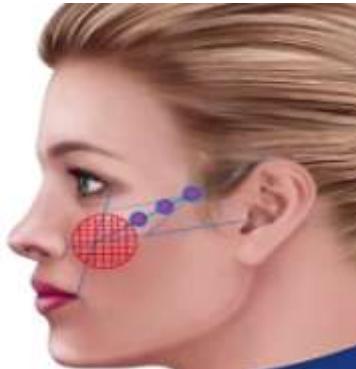
To carry out the protocol for filling the malar (bilateral) region, Rennova® Ultra Volume Lido Hyaluronic Acid was used, 1 glass syringe, luer cap, with 2 mls, on each side. We use a 22G needle and cannula, gauze and alcohol. For asepsis, we use 70% alcohol.

In the clinical case presented, the aim was to transform and volumize the midface, providing structural support through the deep layer of fat, in a bolus, targeting mSOOF, ISOOF and DMCF. (Figure 3)<sup>22,23,24</sup> The marking on the patient's face is performed with a dermatographic pencil. To fill in the malar region, a tragus-alar cartilage line and another exocanthium-cheilo line (or external corner of the eye with oral commissure) were drawn. This intersection is called Ristow's Point. Filling the malar region, also known as 'Top Model Look', is done by projecting the zygomatic arch, bringing beauty and femininity to the face. Provides an immediate mini lifting effect, rejuvenating the facial region, while providing a top model facial style. The volume of hyaluronic acid to be applied varies greatly from patient to patient and depends on clinical assessment. Observe the markings of the points (bolus supra-periosteal injection) and the vectors (retro-injection in columns). (Figure 4)



**Figure 3.** The medial sub-orbicularis oculi fat (1), lateral sub-orbicularis oculi fat (2), and deep medial cheek fat (3) can be located employing the following anatomical landmarks: (4) vertical facial line, (5) midcheek line, (6) zygomatic line. Blue dots can be employed as needle entrance points.

The red circle shows the lateral entry point that may be utilized to perform the bolus technique with a cannula.<sup>23</sup>



**Figure 4.** Marking scheme. Source: the author.

Desirable aesthetic characteristics in the midface generally involve malar projection and full cheeks, as well as a smooth convexity of the lower eyelid to the nasolabial fold, resulting in the ogge curve.<sup>22,23</sup>

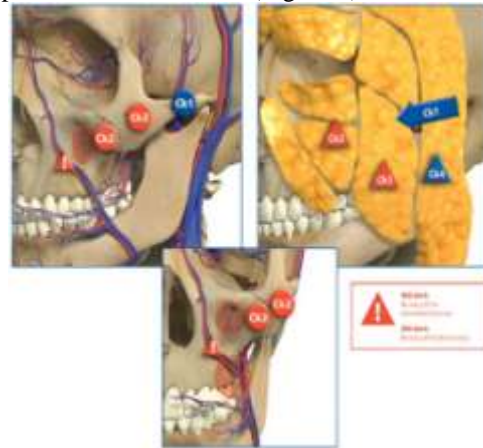
In order to optimize the safety of the procedures and obtain a natural result, professionals seeking to correct the deficiency or change the volume of the midface are essential to master the topographic and three-dimensional anatomy of this area. Anatomical knowledge of the arrangement of the five layers of this region, which ranges from the bone to the skin, presenting deep static fat compartments, separated from the superficial mobile fat pockets by a thin muscular layer. (Figure 5)<sup>23,24</sup>



**Figure 5.** (A) The multilayer anatomy of the cheek spanning from bone to skin. (B) The mobile superficial fat compartments: 1, infraorbital fat compartment; 2, medial cheek fat compartment; 3, middle cheek fat compartment; 4, nasolabial fat compartment. (C) The static deep fat compartments: 1, medial sub-orbicularis oculi fat; 2, lateral sub-orbicularis oculi fat; 3, deep medial cheek fat (medial and lateral deep medial cheek fat).<sup>23</sup>

Anesthesia was performed by infraorbital block with 2% lidocaine + 1:100,000 epinephrine; 1 tube per hemiface, in addition to specific points of entry into the skin of the needle and cannula.

Initially, the filler was applied with a needle, deep plane, bone base, 0.2 at each point, on both sides, totaling 1.2 mls. At point CK1, located in the zygomatic arch, it elevates the malar region, offering support to the upper and lower eyelid. The affected structure is bone and SOOF; point CK2, located on the zygomatic eminence, projecting the malar region and decreasing the eyelid distance. The affected structure is bone and SOOF and CK3, anteromedial malar. Improves the medial eyelid junction, volumizing and smoothing the region. The target structures are bone, fat march for deep help, and medial SOOF.<sup>25</sup> (Figure 6)



**Figure 6.** MD Codes anatomical correlates (a) and in relation to the topographical anatomy of the cheek . Red codes denote alert areas. Reprinted with permission from Allergan plc, Dublin, Ireland.<sup>25</sup>

The second stage of repositioning and volumizing the malar region was carried out using a cannula. The entry point of the pertussis was made linearly 0.1 cm posterior to the CK1 point, allowing the best possible access to the demarcated area, avoiding the removal of the cannula and reducing the number of pertussions and less trauma to the tissues. The filler was placed in a deep subcutaneous plane, in a fan shape, totaling 0.4 mls (on each side), totaling 0.8 mls.

After filling, the region was massaged, allowing shaping and evaluating the lifting effect and projection of the malar region. Risk zones were respected.

The patient's lip filler was performed in the amount of 1.7 ml of Rennova® Lips Lido with 0.3% lidocaine. (Figure 7) The application plane is the labial mucosa. The durability of the procedure



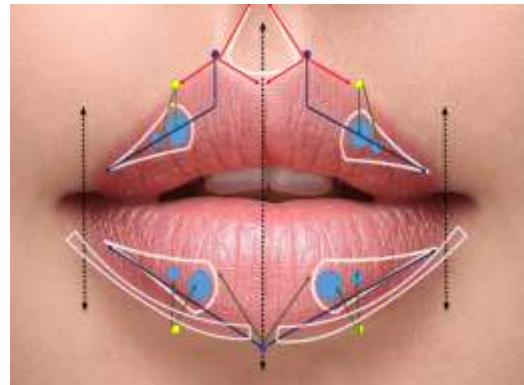
(hyaluronic acid) is approximately 12 months, allowing for variables such as muscle activity, metabolism and co-morbidities and/or harmful habits.

Most lips need restructuring of all their anatomical components. Our variation of the lip filling technique, unlike most of the techniques described, begins with volumization, eversion and projection of luminosity points. After performing infiltrative anesthesia by blocking the infraorbital and mental nerves with 4% Articaine Hydrochloride (40mg/ml) with Epinephrine 1:100,000, (10mg/ml), in the proportion of half an anesthetic tube for each block; 4 percutaneous piercings were performed (in yellow), with a needle of a larger caliber than the 22G cannula, which will be used for this stage of the procedure. Make sure to perform the piercing with the bevel upwards and 0.2 mm from the lip line. For lip volumization, 1 bolus of 0.1 ml is injected on each side of the upper and lower lip (light blue), paying attention to the negative aspiration (mandatory) and we massage so that the product takes on a drop shape (drip towards lip commissure). Later, we injected 1 more bolus with 0.05 ml on each side of the upper and lower lip (light blue) and repeated the entire process of the first phase.

We made the entry port (purple) for the 22g cannula with a larger gauge needle. To accentuate the structuring, eversion and lip volumization, we work with 0.1 ml in each linear path (dark blue), with retro-injection, after the negative aspiration (mandatory), totaling 0.4 mls. This step also assists in the eversion and support of the labial angle.

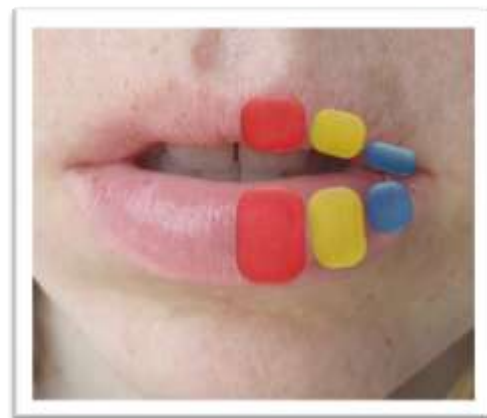
To mark the central region of the lower lip, in order to give it a sexy and youthful appearance, we retro-inject an oblique column (green) of 0.1 ml on each side, starting from the lower central entry point in purple. The lower lip contour is performed with 0.1 ml on each side. We performed the same procedure in all quadrants.

At the junction of the filter and Cupid's bow, with the 22G needle, bevel facing upwards, with mandatory negative aspiration, we perform 3 (retro-injections (red), superficial plane, (0.05 ml in each path).



**Figure 7.** Equilibrium Lips labiogram. Technique Variation. Source: the author.

Lips are a very special area of our face; they are a symbol of attractiveness, youth and sensuality. Furthermore, lips show a high degree of interindividual variation and ethnic differences. The lips are made up of small compartments that vary in size and shape. These intra-labial lip compartments allow the creation of various lip shapes, proportions and sizes. To this end, a multicenter study was carried out, which included people from different ethnic origins. The study revealed that a total of 24 compartments are present (12 anterior and 12 posterior, separated by the orbicularis oris muscle), of which 6 are located anteriorly in the upper lip and 6 anteriorly in the lower lip. These compartments are separated by the midline and decrease in size the closer they are to the corner of the mouth. This potentially explains the highly variable shape of the lips and why mature lips mostly invert laterally and appear empty. Many techniques for volumizing and contouring the lips are available, but it appears that compartment-friendly techniques, such as vertical needle or cannula bolus injections, are the most desired to recreate the natural shape of the lips and avoid the "Sausage Lips" phenomenon. (Figure 8)<sup>26</sup>



**Figure 8.** Intra-labial compartments.<sup>26</sup>



Facial and lip volumization presented satisfactory results in the reported case, without complications or complications. (Figure 9 and 10)



**Figure 9.** Before and After the protocol. Source the author.



**Figure 10.** Lip filler. Variation of the Equilibrium Lips technique. Source: the author.

### III. DISCUSSION

In the Facial Feminization protocol, it is essential to investigate the patient's individual and social needs, their expectations, previous experiences and their understanding of the role of hyaluronic acid and its limitations, defining its indication or not. The needs of the patient are investigated and, within their expectations and understanding of the action of hyaluronic acid, they are defined by whether or not the use of this filler is indicated.

Facial fillers based on hyaluronic acid are the method of choice for facial framing treatment, as high G' prime products are capable of volumizing, defining contours, in addition to providing a lifting effect. The most relevant points for the facial frame are: anterior temporal, zygomatic arch, nose, lips and mandibular angle.<sup>27,28</sup>

There is a huge growing demand among transgender individuals for minimally invasive aesthetic procedures, such as injectable facial fillers and neurotoxins, for facial remodeling and transformation. These procedures can increase

transgender individuals' satisfaction with their appearance and allow them to more effectively harmonize their physical appearance in relation to their self-perception. Several authors provide experience-based treatment considerations and recommendations for the use of minimally invasive facial aesthetic procedures on transgender patients, including case studies that illustrate the use of these procedures for patients transitioning from male to female and female to male. They highlight the success of minimally invasive methods to help transgender patients achieve their facial reshaping goals. When conducted with sensitivity and attention to individual patient goals at various stages of transition, facial procedures can be of great benefit in improving patients' self-perception and overall quality of life.<sup>10,13,28</sup>

Several authors revealed in their studies the positive effects on quality of life related to biopsychosocial aspects. Public perception and stigmatization have also demonstrated significant differences in the gender appearance of facial feminization, whether minimally invasive or surgical, far beyond what hormone therapy can do.<sup>10, 28,29</sup>

Social determinants of health (SDOH) are a complex network of factors that influence the health of people and individuals throughout their lives. There are many drivers of health inequities within the SDOH, such as socioeconomic status, education, employment, gender, and race/ethnicity. It is possible that mental illness can develop when these factors negatively affect health. However, current research focuses primarily on SDOH in cisgender individuals, leaving a scientific gap in transgender individuals that requires considerations when providing comprehensive health care.<sup>10,30,31</sup>

For trans women, the face is one of the most important parts of the body to be changed at the beginning of the transition, where transsexual women indicated facial aesthetic procedures in orofacial harmonization and/or plastic surgery as a priority during this process. It is evident that the demand for facial sexual reassignment procedures in transgender women is increasing and that health professionals need to be trained to offer the best possible treatment for these patients.<sup>32,33,34</sup>

Orofacial harmonization procedures for feminization are non-invasive and non-definitive, and present great advantages in contributing to the diagnosis, planning, treatment, monitoring and confirmation of gender incongruity, allowing women to be able to visualize the feminine facial characteristics that will be adopted after hormonal treatment and definitive surgeries. In addition to being procedures with broad reversibility.<sup>35</sup>



The regions of the middle third most responsible for the sexual dimorphism of the face are located in the temporal region, in the zygomatic process, malar and nose. To obtain a more pronounced and voluminous malar, characteristic of the female face, the dental surgeon can use fillers such as hyaluronic acid and calcium hydroxyapatite (which can produce a volumizing effect by increasing dermal thickness).<sup>13,35</sup>

The mouth plays an important role in facial aesthetics, especially in the lower third of the face. It is located in the central region of the face and is responsible for communication and social interaction. An attractive smile is made up of factors such as tooth alignment, lip size and position, muscular action, tooth shape, tooth and gum exposure that influence its harmony. The amount of incisal edge that appears both at rest and during smiling is greater in women than in men. The upper lip, measured from the buccal isthmus to the base of the nose, is larger in males. Upper lip filler, by giving greater volume to the upper lip vermilion, allows this distance to be visually reduced and makes the lip appear more feminine.<sup>36,37</sup>

#### IV. CONCLUSION

Facial feminization protocols take a socially transformative and highly individualized approach to aligning your external facial features with your actual gender identity. This case report highlights some differences between male and female facial regions; pre-procedure aspects (previous experiences and current expectations), minimally invasive techniques and planning and the presentation of a labiogram that takes into account the anatomical needs of the case, and can be adapted for any lip filling, respecting the individualities of each patient. Regardless of techniques and materials, the greatest benefit of the procedures performed is the recovery of self-image, self-esteem and the establishment of your real identity.

In view of the above, we must recognize the need for training health professionals, especially dental surgeons specialized in orofacial harmonization, maxillofacial surgery and traumatology and facial aesthetic surgeries, to care for these patients and provide a better quality of life. The patient is still in the process of facial feminization.

#### DECLARATION OF COMPETITION INTEREST AND SPONSORSHIP

According to the authors, there is no conflict of interest and sponsorship of brands and/or products

used. These brands were presented so that the reader (health professional) knows what was used to construct the results.

#### REFERENCES

- [1]. Cordeiro DM, Saadeh A. Sexuality disorders. In: Humes EC, Viera MEB, Fraguas Júnior R, Hübner MMC, Olmos RD, editors. *Psiquiatria interdisciplinar*. Barueri: Manole; 2016. p. 152-70.
- [2]. Soll BM, Robles-Garcia R, Brandelli-Costa A, Mori D, Mueller A, Vaites-Fontanari AM, et al. Gender incongruence: a comparative study using ICD-10 and DSM-5 diagnostic criteria. *Braz J Psychiatry*. 2018; 40(2):174-80. <https://doi.org/10.1590/1516-4446-2016-2224>
- [3]. IBGE (2023). Casamento homoafetivo: amor, visibilidade e cidadania. LGBT (lésbicas, gays, bissexuais e transgêneros). <https://www.ibge.gov.br/busca.html?searchword=transg%C3%AAneros>. Acesso em 02/04/2024.
- [4]. São Paulo (Cidade). Prefeitura de São Paulo. Secretaria Municipal da Saúde. Coordenação da Atenção Primária à Saúde. Protocolo para o atendimento de pessoas transexuais e travestis no município de São Paulo. São Paulo: Secretaria Municipal da Saúde; 2020. 133 p.
- [5]. Bueno MV., et al. Facial procedures for gender affirmation in people with gender dysphoria: a literature review. *Arq Med Hosp Fac Cienc Med Santa Casa São Paulo*. 2022; 67:e017.
- [6]. Pan, S, Honig, SC. Gender-affirming surgery: current concepts, *Curr. Urol. Rep.* 19 (8) (2018) 62 Published 2018 Jun 7, doi: 10.1007/s11934-018-0809-9 .
- [7]. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision* . 5th. Washington, DC: American Psychiatric Association; 2022. 511–520.
- [8]. Rosales, O., et al. Facial feminization procedures and its impact on quality of life: A mini review. *Health Sciences Review* 7 (2023) 100091. <https://doi.org/10.1016/j.hsr.2023.100091>
- [9]. Devegan, L., et al. Minimally Invasive Facial Cosmetic Procedures. *Otolaryngologic clinics of north américa*. Vol. 52,3 (2019).



- [10]. Noronha Filho, OL., et al. Lip lifting as a Supporting Technique in the Facial Feminization Process of Transgender Patients: Case Report. *Medicon Medical Sciences*. Volume 4 Issue 3 March 2023. DOI: 10.55162/MCMS.04.112
- [11]. Ousterhout, DK. *Facial Feminization Surgery: A Guide for the Transgendered Woman*. Omaha, Nebraska: Addicus Books. (2009)
- [12]. Ascha, M., et al. (2019) Nonsurgical management of facial masculinization and feminization. *Aesthet Surg J*;39(5):NP123–NP137.
- [13]. De Boulle, K., et al. (2021) Considerations for the Use of Minimally Invasive Aesthetic Procedures for Facial Remodeling in Transgender Individuals. Dove Medical Press Limited
- [14]. Deschamps-Braly, JC (2018). Facial Gender Confirmation Surgery. *Clinics in Plastic Surgery*, 45(3), 323–331
- [15]. Popenko, NA., et al. (2017) A quantitative approach to determining the ideal female lip aesthetic and its effect on facial attractiveness. *JAMA Facial Plast Surg*;19(4):261-267.
- [16]. Magri, IO, MAIO, M. Remodeling of the middle third of the face with fillers. Remodeling of the middle third of the face with fillers. DOI: 10.5935/2177-1235.2016RBCP0094
- [17]. Sykes, JM, Dilger, AE, Sinclair, A. (2019). *Surgical Facial Esthetics for Gender Affirmation*. Dermatologic Clinics.
- [18]. Bracanović T. Sex reassignment surgery and enhancement. *J Med Philos*. 2017;42(1):86–102. doi:10.1093/jmp/jhw036
- [19]. Ministério da Saúde (BR). *Relação nacional de medicamentos essenciais: 2020* [Internet]. Brasília: Ministério da Saúde; 2019 [citado 2020 nov 1]. 217 p. Disponível em: [https://bvsms.saude.gov.br/bvs/publicacoes/relacao\\_medicamentos\\_rename\\_2020.pdf](https://bvsms.saude.gov.br/bvs/publicacoes/relacao_medicamentos_rename_2020.pdf)
- [20]. Augusto, RM, Oliveira, DC, Polidoro, M. Description of drugs prescribed for hormone therapy in specialized health services for transsexual and transvestite persons in Rio Grande do Sul, Brazil, 2020. *Epidemiologia e Serviços de Saúde*, Brasília, 31(1)e2021502, 2022.
- [21]. Governo Federal. DECRETO N° 8.727, DE 28 DE ABRIL DE 2016. [https://www.planalto.gov.br/ccivil\\_03/\\_ato2015-2018/2016/decreto/d8727.htm](https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2016/decreto/d8727.htm)
- [22]. Fitzgerald R, Carqueville J, Yang PT. An approach to structural facial rejuvenation with fillers in women. *Int J Womens Dermatol*. 2019;5(1):52-67.
- [23]. Trévidic, P., et al. Injection Guidelines for Treating Midface Volume Deficiency With Hyaluronic Acid Fillers: The ATP Approach (Anatomy, Techniques, Products). *Aesthetic Surgery Journal* 2022, Vol 42(8) 920–934.
- [24]. Cotofana S, Lachman N. Anatomy of the facial fat compartments and their relevance in aesthetic surgery. *J Dtsch Dermatol Ges*. 2019;17(4):399-413.
- [25]. Maio, M. MD CodesTM: A Methodological Approach to Facial Aesthetic Treatment with Injectable Hyaluronic Acid Fillers. *Aesth Plast Surg* (2021) 45:690–709 <https://doi.org/10.1007/s00266-020-01762-7>
- [26]. Cotofana, S, Hong, WJ, Horne, J, Harris, S, Surek, CC, Frank, K, Alfertshofer, M, Kattil, PK, Sakuma, T, Onishi, EC, Bertucci, V, Green, JB, Smith, MP, Khan, A, Lowry N. Intralabial Lip Compartments and their Potential Clinical Relevance. *Plast Reconstr Surg*. 2023 Jun 14. doi: 10.1097/PRS.0000000000010820. Epub ahead of print. PMID: 37314374.
- [27]. Faria, GEL., et al. Facial beautification with fillers and main differences between genders. *Rev. Bras. Cir. Plást*. 2021;36(1):100-107. DOI: 10.5935/2177-1235.2021RBCP0019.
- [28]. Barnett, S.L.; Choe, J.; Aiello, C.; Bradley, J.P. Facial Feminization Surgery: Anatomical Differences, Preoperative Planning, Techniques, and Ethical Considerations. *Medicina* 2023, 59, 2070. <https://doi.org/10.3390/medicina59122070>
- [29]. Brian, N., et al. Evaluation and treatment of facial feminization surgery: part I. forehead, orbits, eyebrows, eyes, and nose. *Pediatric/Craniomaxillofacial/Head&Neck Review Article*. 503-510. DOI: 10.5999/aps.2021.00199
- [30]. Kim I, Sekh MB, Khan T, Gunasekara, R, Kogan I. Social Determinants of Health in Urban Transgender Patients: A Case





- Report. Cereus - Open Access Case Report. DOI: 10.7759/cureus.42941
- [31]. Alper DP, Almeida MN, Hu KG, De Baun HM, Hosseini H, Williams MCG, Salib A, Shah J, Persing JA, Alperovich M. Quantifying Facial Feminization Surgery's Impact: Focus on Patient Facial Satisfaction. *Plast Reconstr Surg Glob Open*. 2023 Nov 3;11(11):e5366. doi: 10.1097/GOX.0000000000005366. PMID: 37928639; PMCID: PMC10624460.
- [32]. Rocon, P. C., Sodré, F., Rodrigues, A., Barros, M. E. B. de, Pinto, G. S. S., & Roseiro, M. C. F. B. (2020). [Life after sexual reassignment surgery: Significance for gender and transsexuality]. *Ciencia & Saude Coletiva*, 25(6), 2347–2356. doi.org/10.1590/1413-81232020256.26002018
- [33]. Lima, R. R. T. de, Flor, T. B. M., & Noro, L. R. A. (2023). Revisão sistemática sobre a atenção à saúde para travestis e transexuais no Brasil. *Revista de Saúde Pública*, 57, 19. <https://doi.org/10.11606/s1518-8787.2023057004693>
- [34]. Botassi MC, Isolan CP, Costa ADG, Costa MDMA, Dietrich L. Orofacial feminization of transgender women: how dentistry can contribute to social inclusion. *Rev. Psicol Saúde e Debate*. Out., 2023;9(2): 587-606. DOI:10.22289/2446-922X.V9N2A35
- [35]. Viscomi, B. (2022). From Anatomical Modifications to Skin Quality: Case Series of Botulinum Toxin and Facial Fillers for Facial Feminization in Transgender Women. *Clinical, Cosmetic and Investigational Dermatology*, 15, 1333–1345. Doi.org/10.2147/CCID.S363882
- [36]. Mahn, DH, Reangber S. Gingival Display in “Forced” Smile Evaluated by Sex and Age. *Compendium of Continuing Education in Dentistry (Jamesburg, N.J.: 1995)*, 43(2), e9–e12. (2022). PMID: 35148479
- [37]. Cunha, J., Fernandes, G. V. O., Fernandes, J. C. H., Lopes, P. C., & Rio, R. (2023). The Interference of Age and Gender on Smile Characterization Analyzed on Six Parameters: A Clinical-Photographic Pilot Study. *Medicina (Kaunas, Lithuania)*, 59(3), 595. Doi.org/10.3390/medicina59030595