

Facial procedures for gender affirmation in people with gender dysphoria: a literature review

Procedimentos transexualizadores faciais em pessoas com disforia de gênero: revisão de literatura

Marcus Vinícius Bueno¹ , Letycia Mary lida¹ , Rita de Cássia D'Ottaviano Nápole¹ ,
Bruna Luiza Roim Varotto¹ , Reynaldo Antequera¹ 

ABSTRACT

Introduction: Transgender people are individuals who experience discomfort or anguish caused by the discrepancy between their gender identity and their sex assigned at birth, so they intensely need to experience the opposite gender. The main purpose of facial masculinization and facial feminization is to provide the transgender individual with a face that matches their real gender and make them accept, recognize, and identify themselves when looking in the mirror, without harm or discomfort. **Objective:** To carry out a review of the literature on facial procedures for gender affirmation undergone by transgender men and women. **Methodology:** A literature review was carried out, using the databases: VHL, Google Scholar, LILACS, PubMed, SciELO, and Web of Science. Articles in Portuguese and English were used as selection criteria based on the descriptors from the MeSH (Medical Subject Headings) and DeCS (Descriptors in Health Sciences): transgenderism OR sex reassignment procedures OR gender identity AND feminization OR masculinization. **Results and Conclusion:** Twenty-five studies were included to compose this review. Facial procedures for gender affirmation promote confirmation and reduction of gender incongruity in transgender individuals. There is a great scarcity of studies on this group of patients resulting from social transphobia. Therefore, it is necessary to promote the awareness and training of all healthcare professionals to reduce stigma and prejudice through information and the creation of care protocols that understand the needs of transgender women and men.

Keywords: Gender identity, Transgender persons, Social construction of gender

RESUMO

Introdução: Transexuais são indivíduos que apresentam desconforto ou angústia causados pela discrepância entre a sua identidade de gênero e o seu sexo atribuído ao nascimento, de modo que experimentam intensamente a necessidade de vivenciar o gênero oposto. A principal finalidade da masculinização e feminização facial é proporcionar ao indivíduo transexual um rosto que condiz com seu real gênero e fazer com que se aceitem, se reconheçam e se identifiquem ao olhar no espelho, sem prejuízo ou algum desconforto. **Objetivo:** Realizar uma revisão da literatura sobre os procedimentos transexualizadores faciais a que são submetidos homens e mulheres transexuais. **Metodologia:** Foi realizada revisão de literatura destacando-se o uso dos bancos de dados: BVS, Google Acadêmico, LILACS, PubMed, SciELO e Web of Science. Utilizou-se como critérios de seleção artigos em língua portuguesa e inglesa com os descritores provenientes do Medical Subject Headings (MeSH) e dos Descritores em Ciências da Saúde (DeCS): transexualismo OU procedimentos de readequação sexual OU identidade de gênero E feminização OU masculinização. **Resultados e conclusão:** Foram incluídos 25 estudos para compor esta revisão. Procedimentos transexualizadores faciais promovem a confirmação e a diminuição da incongruência de gênero em indivíduos transexuais. Há uma grande escassez de estudos com este grupo de pacientes decorrentes da transfobia social. Deve-se, portanto, promover a conscientização e a capacitação de todos os profissionais da saúde, com o objetivo de diminuir o estigma e o preconceito por meio da informação e da criação de protocolos de atendimento que entendam as necessidades de mulheres e homens transexuais.

Palavras-chave: Identidade de gênero, Pessoas transgênero, Construção social do gênero

¹Universidade de São Paulo, Hospital das Clínicas - São Paulo (SP), Brazil.

Address for correspondence: Marcus Vinícius Bueno. Universidade de São Paulo. Hospital das Clínicas. Faculdade de Medicina. Instituto de Psiquiatria. Unidade de Odontologia. Rua Dr. Ovídio Pires de Campos, 785 - Pinheiros, 05403-903 - São Paulo (SP), Brazil. E-mail: marcus.vsr@gmail.com

Article received: June 7, 2022. Article approved: August 23, 2022. Article published: October 19, 2022

Responsible Editor: Prof. Dr. Eitan Naaman Berezin (Editor-in-Chief).

INTRODUCTION

The diagnosis of transgenderism was first described and published in 1975 in the ICD-9. This condition was no longer considered a pathology in the DSM-V, in 2013 only, when it started to be considered dysphoria. It is defined as a disorder affecting individuals who have a great difference between the gender experienced or expressed and the gender assigned at birth^(1,2). Gender identity is understood as the expression of an identity constructed based on how the individual recognizes and/or introduces themselves. It may or may not correspond to their biological body and must be differentiated from sexual orientation, which is linked to how the person relates sexually and emotionally⁽³⁾. The National Policy on Comprehensive Health for lesbians, gays, bisexuals, transvestites and transgender people, queers, intersex, and asexual people (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"⁽³⁾.

Transgenderism can be understood as individuals who experience discomfort or anguish caused by the discrepancy between their gender identity and their sex assigned at birth, so that they intensely have the desire to migrate to the opposite gender, and may be heterosexual, homosexual, or bisexual⁽³⁻⁵⁾. In other words, it is a term used to designate transgender women and men⁽⁶⁾. According to the XI Transgender Handbook of the Unified Health System⁽³⁾, transgender women are female individuals who do not identify with their male biological genitals, as well as transgender men, who are male individuals who do not identify with their biological female genitals. In both cases, there is no agreement with their imposed sociocultural attributions and, in some cases, they can experience their chosen gender identity through body modifications, thus exercising their gender activity according to their biopsychosocial well-being⁽³⁾.

Gender affirmation procedures, such as genital reassignment, are considered a private domain of the transgender individual, since certain body characteristics can prevent successful social interaction and acceptance as a member of the opposite sex⁽⁷⁾. In this context, facial alteration procedures in transgender individuals, whether surgical and/or hormonal treatments, are an important tool to reduce and treat gender dysphoria, improving the quality of life and allowing the transgender individual to experience life with a face as close as possible to their real experienced gender^(7,8). Among all patients diagnosed with gender dysphoria, only 10% to 15% belong to the group who wish to live and be accepted as the opposite sex at birth⁽⁹⁾. These patients experience strong discomfort with their body and characteristics that do not match their gender and search

for treatments to make the body as harmonious as possible considering their experienced gender⁽⁹⁾.

Social transition through hormone therapy with estrogens, gonadorelin analogs, antiandrogens, and spironolactone or (genital and facial) surgery is effective in the treatment of gender dysphoria⁽¹⁰⁾. Body features, more specifically, facial features can be a major obstacle to social acceptance as a member of the opposite sex, given the marked differences between the facial features of male and female individuals⁽⁹⁾. In Brazil, a person diagnosed with transgenderism, according to the ICD-10, can undergo sex reassignment surgery, totally free of charge and funded by the SUS⁽²⁾. The gender affirmation process in Brazil guarantees comprehensive health care for transgender people, which includes receiving and having access to hormone therapy, and surgery to adapt the biological body to social and gender identity^(2,11). Comprehensive care takes place in a multidisciplinary context and can include a general practitioner, a psychiatrist, an endocrinologist, a gynecologist, a urologist, a plastic surgeon, and a dentist, among other professionals^(3,9). However, even with universal coverage provided by access to healthcare, the transgender population refrains from seeking specialized care due to the prejudice and stigma prevalent among healthcare professionals⁽¹²⁾.

Facial feminization (FF) procedures in transgender women are more complex than in transgender men due to the striking facial features of males⁽¹²⁾. Facial masculinization (FM) and FF are intended to provide the transgender individual with a face that matches their real gender and make them accept, recognize, and especially identify themselves when looking in the mirror, without prejudice or discomfort⁽¹³⁾. It is a procedure that saves lives by reducing psychological problems, bullying, avoiding intimidation, and avoiding physical and psychological aggression⁽⁸⁾. Since the facial changes characteristic of puberty can be neutralized and altered, transgender women and men must be certain of the change from a psychological point of view and preferably have mature bones at the time of surgery, since the presence of cartilage and immature bones in the growth phase can compromise the result and lead to dissatisfaction after the surgery⁽¹³⁻¹⁵⁾.

Non-surgical facial alteration procedures play a fundamental role in gender affirmation among the transgender population, as they are non-invasive procedures with relevant results over a short period of time. In addition, the results can be reversed in case the individual does not identify with the new characteristic, including for patients waiting for surgery, those undergoing hormone therapy, or those who do not have a surgical indication⁽¹⁶⁾. Transgender men exposed to hormone therapy are the ones who experience the most significant changes in their faces, as there is an increase in facial hair and, in some cases, even facial muscles.

FF is a set of surgical and non-surgical procedures used to make the face of transgender women⁽¹⁷⁾ look feminine. The most commonly performed procedures include reducing the forehead contour by advancing the hairline, lifting and increasing lip volume with fat, implants, or fillers; genioplasty, rhinoplasty, and laryngoplasty, followed by facial hair removal, use of hormone therapy, eyebrow lifting, cheek augmentation, orthognathic surgery, and changes in mandibular contour and angle^(8,15).

FM changes the characteristics of the bone structure and soft tissues⁽¹⁸⁾. It was first described by Ousterhout, in 2011, when several cisgender women sought care to masculinize their female features⁽¹⁹⁾. MF can be achieved through surgical alterations, such as enlargement of the forehead or supraorbital crest through the application of hydroxyapatite and calvarial bone graft; maxillary augmentation through the use of calcium phosphate; nasal enlargement, since male people have longer, wider noses with sharper angles than females; decrease the upper lip vermilion, justified by the fact that men have thinner lips with a longer upper lip with less vermilion and less exposure of the central incisors; jaw augmentation through bone grafts or apposition of hydroxyapatite crystals, while men have a squarer face with a more prominent jaw and sharper angles; vertical and horizontal chin augmentation, as men have a wider chin, through genioplasty, placement of implants, injectable fillers and application of autologous fat; cartilage graft in the thyroid, simulating the Adam's apple that can lead to vocal changes, reaching a slightly lower tone that can be improved with testosterone therapy and speech and language therapies⁽¹⁸⁾.

Orofacial harmonization, through the use of botulinum toxin A and fillers, has become a valuable resource for aesthetic and therapeutic treatments. Therefore, the present work aims to carry out a review of the literature on the facial procedures for gender affirmation undergone by transgender men and women.

METHODOLOGY

The methodology involved the collection of scientific articles from December 2020 to May 2022 in the following electronic databases: Google Scholar, Pubmed (MEDLINE), SciELO, and Web of Science. As descriptors for the research, according to the DeCS and MeSH, the following terms in Portuguese were used: transexualidade OR procedimentos de readequação sexual OR identidade de gênero AND feminização OR masculinização. In English, the following were used: transgenderism OR sex reassignment procedures OR gender identity AND feminization OR masculinization.

The articles were then included according to the following criteria: works about transgender men and women, with an emphasis on facial procedures for gender affirmation.

The exclusion criteria were: studies that were not available in Portuguese or English and that were not available online in full.

RESULTS AND DISCUSSION

Thirty-two studies were initially selected, of which two were found to be duplicates and were excluded. The remaining 30 had their titles and abstracts read for the application of the established selection criteria. In the end, 25 articles were selected to compose this review (Figure 1).

Of these, only 16 studies are about facial changes in transgender patients, and only five of them address FM (Table 1).

The other studies (n = 9) provide general information about transgender individuals, such as access to healthcare and quality of life. Only one study was conducted in Brazil.

Among the LGBTQIA+ population, the transgender population finds it more difficult to access a specialized public healthcare service because they suffer from transphobia⁽²²⁾. According to Rocon et al.⁽²²⁾, the transformation of the body can constitute a social determinant of health in this group, since, in seeking to modify their bodies to produce a coherence between the physical-body structures and the expectations of the gender they wish to live, they make use of functional and aesthetic medical-pharmacological resources composed of countless variables involved in the health-disease processes of this population. In a complementary way, Dubov, Fraenkel⁽¹²⁾, highlight the proportional invariability between the lack of access to gender affirmation treatments and an increase in dysphoria shown by these patients, urging them to seek clandestine gender affirmation treatments, such as the ingestion of industrial silicone and hormone therapy without prescription and medical follow-up, resulting in frustrations, postoperative complications

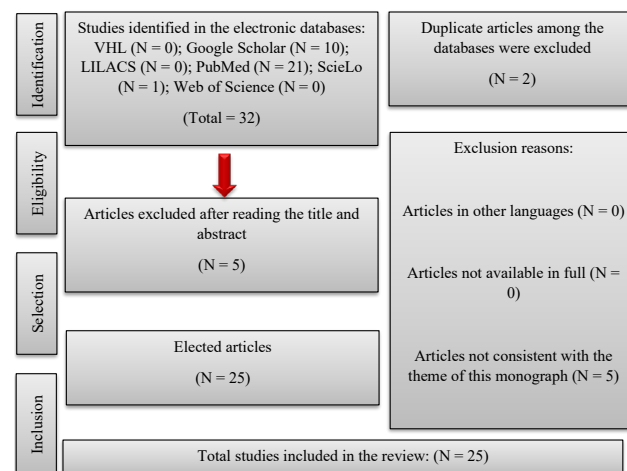


Figure 1 - Flowchart of the article identification and selection process.

Table 1 – Compilation of studies on facial feminization and masculinization.

Author, year (Country)	Kind of study	Results	Conclusion
Ainsworth, Spiegel, 2010 ⁽⁵⁾ (USA).	Cross-sectional.	Quality of life in transgender women without FF was lower than in the general population.	FF suggests an improvement in the quality of life of transgender women.
Becking et al., 2007 ⁽⁷⁾ (USA).	Case report.	Thirty-five patients were elected to undergo surgical procedures for FF.	It is not possible to say that FF surgery alone was enough to improve the lives of transgender patients.
Van Boerum et al., 2019 ⁽⁸⁾ (USA).	Literature review.	FF is a procedure performed in 45% of transgender women.	The purpose of gender affirmation surgeries is to reduce incongruity.
Shams, Motamedi, 2009 ⁽⁹⁾ (Islamic Republic of Iran).	Case report.	Ten patients underwent hard and soft tissue changes with FF.	All patients were satisfied after surgery.
Altman, 2012 ⁽¹⁰⁾ (United Kingdom).	Literature review.	Several procedures involving sculpting and contouring of the facial skeleton are used for facial treatments.	The future of FF depends on investments to make it public and democratic.
Esmonde et al., 2019 ⁽¹¹⁾ (USA).	Literature review.	Uninformed.	Gender affirmation surgery is an essential treatment for patients with gender dysphoria.
Dubov, Fraenkel, 2018 ⁽¹²⁾ (USA).	Literature review.	Arguments in defense of the gratuity and democratization of FF procedures.	All face reassignment procedures must have their costs covered by public entities.
Deschamps-Braly, 2019 ⁽¹³⁾ (USA).	Case report.	Uninformed.	FF and FM are powerful tools for addressing gender incongruity.
Facque et al., 2019 ⁽¹⁴⁾ (USA).	Literature review.	Uninformed.	Facial surgical procedures can facilitate gender transition and integration with society, as well as align an individual's anatomy and identity.
Parker et al., 2019 ⁽¹⁵⁾ (United Kingdom).	Literature review.	Uninformed.	FF and FM procedures must be individualized for each patient to achieve better results.
Ascha et al., 2018 ⁽¹⁶⁾ (United Kingdom).	Literature review.	Only four articles were included due to a lack of studies on injectables in transgender patients.	Injectables can be used as a substitute for surgical FF and FM procedures.
Raffaini et al., 2019 ⁽¹⁷⁾ (Italy).	Retrospective.	Forty-nine patients underwent FF, and none of them had complications.	The correct indication of the type of facial sex reassignment surgery that should be performed improves patient satisfaction and reduces costs.
Sayegh et al., 2019 ⁽¹⁸⁾ (USA).	Literature review.	Fifteen studies were selected. Only two studies discussed the results of transgender men who underwent FM procedures.	More studies are needed on FM techniques for transgender patients.
Deschamps-Braly, 2018 ⁽¹⁹⁾ (USA).	Literature review.	Uninformed.	FF and FM have great power to improve the quality of life of transgender patients.
Spiegel, 2019 ⁽²⁰⁾ (USA).	Literature review.	Review of 20 years of technique with more than a thousand FF procedures.	These procedures are of great value in reducing the incongruity of the transgender patient.
Morrison et al., 2016 ⁽²¹⁾ (USA).	Systematic review.	Only seven patients, among 1121 who underwent FF procedures, suffered complications.	FF procedures are safe and effective.

that can lead to suicide, with a mortality rate of 40%⁽¹²⁾. In this way, understanding the importance of the gender affirmation process can be a way to stimulate the creation of social and healthcare policies to ensure the safety and well-being of individuals during their transition.

Spiegel⁽²⁰⁾ refers to procedures aimed at facial alterations in transgender patients as a powerful way to help this community against prejudice and the feeling of not belonging to the real gender. Corroborating this, Altman⁽¹⁰⁾ highlights the high frequency of transgender women performing facial changes before breast implant or genital reassignment surgeries, justified by the great need for social interaction as already belonging to the female gender. Dubov, Fraenkel⁽¹²⁾, add to this study by considering that there is a great incongruity and conflict between the “true self” and the “body self” that cannot be resolved with psychotherapy only, but which can, however, be alleviated through hormonal and surgical interventions⁽¹²⁾. The findings reflect the impact of aesthetics on living in society and, consequently, on the order in which gender affirmation procedures are performed.

SUS provides full coverage for gender transition, including a minimum 2-year follow-up by psychotherapy and hormone therapy at the beginning of the transition. However, according to Varotto et al.⁽²³⁾, in their integrative review, transgender patients have poorer access to healthcare services, prevention programs, and private services due to the prejudice suffered by them, with a difference in treatment compared to heterosexual patients. Raffaini et al.⁽¹⁷⁾, point out that this prior monitoring facilitates the transition, and increases acceptance and commitment to the new gender. In contrast, many healthcare services around the world, such as in the United States, do not have a public, universal healthcare system; health insurance plans do not cover these procedures because they are considered aesthetic procedures that do not contribute to the treatment of dysphoria, reflecting the medical-health care bias towards transgender patients⁽¹²⁾. The two realities pointed out reflect the development of mental disorders and the search for specialized healthcare centers, either clandestine or not, promoting an increase in stigma or the normalization of this reality. Macdonald et al.⁽²⁴⁾ show that compulsive eating disorders in this population are very common as a way to achieve the ideal body image, and suggest follow-up with dentists to avoid the development of erosive dental processes and periodontal diseases that can lead to the loss of teeth. The importance of having multi-professional services, with the presence of dentists, doctors, nutritionists, and psychologists, is demonstrated by Morrison et al.⁽²¹⁾, when verifying an improvement in the quality of life of transgender patients undergoing gender affirmation procedures compared to those who did not. Like Facque

et al.⁽¹⁴⁾, Deschamps-Braly⁽¹³⁾, and Ainsworth and Spiegel⁽⁵⁾ point out. Dubov, Fraenkel⁽¹²⁾ also found an improvement in general congruence, and greater acceptance and satisfaction of body image, reducing anguish and allowing better interpersonal relationships with an impact on reducing “anti-transgender” violence and intolerance⁽¹²⁾.

Raffaini et al.⁽¹⁷⁾ refer to FF as a process that aims to produce a pleasant aesthetic through the patient’s postoperative self-attractiveness. Parker et al.⁽¹⁵⁾, however, refer to FF not only as an influence on aesthetics, but also in the sense of belonging and inclusion; in contrast with the US healthcare system, which uses this argument to not cover any gender affirmation procedures^(12,15). The sex-determining facial features of hard and soft tissues have been researched and studied by anthropologists for years⁽²¹⁾. Thus, it is necessary to remodel bone structures and manage the soft tissues to achieve a good result in gender affirmation procedures. To this end, Ascha et al.⁽¹⁶⁾ and Raffaini et al.⁽¹⁷⁾ say that the objective of FF is to smooth male facial features, promoting the rounding of acute angles and smoothing contour lines^(15,17). Although the proposed surgical procedures for FF basically follow the same protocol, Raffaini et al.⁽¹⁷⁾ propose the application of botulinum toxin for masseter muscle hypotrophy, in the same way as Spiegel⁽²⁰⁾ and also Ascha et al.⁽¹⁶⁾, justifying the application of the toxin with the same purpose. In addition, this substance can also be used to improve contour and volume and raise the lateral arch of the eyebrow, eliminate forehead wrinkles, and promote a more open look, reducing robust male characteristics. Ascha et al.⁽¹⁶⁾ are the only authors to describe a preference for facial changes, such as the use of lasers to remove beards before body changes, unlike men who prefer to change bodily characteristics, such as the size of the breasts. The same authors cite the frequent use by transgender women of fillers such as hyaluronic acid to enlarge the lips, change the facial contours, decrease the nasolabial folds, increase the malar, increase the nasolabial angle, and provide a less long and thinner nose, obtaining an obtuse nasofrontal angle to achieve a convex “heart”-shaped face as a means to achieve the characteristics described by Van Boerum et al.⁽⁸⁾, and Altman⁽¹⁰⁾, regarding the facial norms of femininity⁽¹⁶⁾.

Unlike FF, transgender men generally do not need to undergo surgical procedures for FM, since hormone treatment with testosterone is sufficient to promote an effect on the body and soft tissues, as reported by Raffaini et al.⁽¹⁷⁾ However, according to Sayegh et al.⁽¹⁸⁾, treatments for FM are not limited to the ingestion of testosterone or application of botulinum toxin and fillers. Therefore, dentists and other healthcare professionals must understand the importance of the role of FM in the process of gender affirmation, promoting an improvement in social

reintegration, as mentioned by Ardebili et al.⁽²⁵⁾, who found that transgender men have greater success rates in their personal and professional lives compared to transgender women. This difference in success between transgender men and women may also suggest greater stigma towards them compared to transgender men, also justified by the greater number of interventions carried out in the female group. However, there are no studies in the literature with statistics that prove this hypothesis, as well as there are no studies available on the performance of dentists concerning these patients, as mentioned by Sayegh et al.⁽¹⁸⁾ in their study. Some surgical procedures for gender transition can be performed in a single moment. However, Parker et al.⁽¹⁵⁾ give preference to different moments, providing patients with the time needed to evaluate the gender affirmation surgery and judge whether it is necessary to perform more facial procedures for gender affirmation.

Notably, there are many more techniques available for female than male gender affirmation procedures, which is reflected in the literature⁽¹⁸⁾. This discrepancy may be associated with the low demand for procedures by transgender men, the scarcity of specialized places, and the overcrowding of existing ones that promote such procedures⁽¹⁸⁾. However, Esmonde et al.⁽¹¹⁾, and Varotto et al.⁽²³⁾, reaffirm that training and continuous and

permanent education of healthcare professionals on the care of transgender men and women are necessary, configuring a welcoming environment, and not an oppressive one. For example, promoting fields for social name and gender in clinical records, all professionals using the patient's social name when interacting directly with them, consultations held in closed spaces and not on screens (as in college clinics), access to restrooms that are aligned with the patient's gender, and face-to-face, verbal, written, or online access for those desiring additional healthcare.

CONCLUSION

Facial procedures for gender affirmation promote gender confirmation to reduce the incongruity between the gender of transgender individuals and their sex assigned at birth. There is a great scarcity of studies on this group of patients resulting from established social transphobia and the fact that existing surgical and non-surgical protocols for FM and FF are not supportive. Therefore, awareness and training of all healthcare professionals must be promoted through the collection of information and the design of scientific studies to reduce stigma and prejudice. Care protocols that meet the needs of transgender women and men must also be created.

Funding: none.

Conflicts of interest: The authors declare no conflict of interest.

Authors' contribution: All authors contributed at all stages of the article.

REFERENCES

1. Cordeiro DM, Saadeh A. Transtornos de sexualidade. 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, Vaitses-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. 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.
4. Arcelus J, Bouman WP, Noortgate WVD, Claes L, Witcomb G, Fernandez-Aranda F. Systematic review and meta-analysis of prevalence studies in transsexualism. *Eur Psychiatry*. 2015; 30(6):807-15. <https://doi.org/10.1016/j.eurpsy.2015.04.005>
5. Ainsworth TA, Spiegel JH. Quality of life of individuals with and without facial feminization surgery or gender reassignment surgery. *Qual Life Res*. 2010; 19(7):1019-24. <https://doi.org/10.1007/s11136-010-9668-7>
6. Salles DG, Gonçalves JS, Araújo LD. A transexualidade na literatura científica das Ciências da Saúde. *Inf Inf*. 2017; 22(2):265-92. <https://doi.org/10.5433/1981-8920.2017v22n2p265>
7. Becking AG, Tuinzing DB, Hage JJ, Gooren LJG. Transgender feminization of the facial skeleton. *Clin Plast Surg*. 2007; 34(3):557-64. <https://doi.org/10.1016/j.cps.2007.04.009>
8. Van Boerum MS, Salibian AA, Bluebond-Langner R, Agarwal C. Chest and facial surgery for the transgender patient. *Transl Androl Urol*. 2019; 8(3):219-27. <https://doi.org/10.21037/tau.2019.06.18>
9. Shams MG, Motamedi MHK. Case report: feminizing the male face. *Eplasty*. 2009; 9:e2.

10. Altman K. Facial feminization surgery: current state of the art. *Int J Oral Maxillofac Surg.* 2012; 41(8):885-94. <https://doi.org/10.1016/j.ijom.2012.04.024>
11. Esmonde N, Najafian A, Penkin A, Berli JU. The role of facial gender confirmation surgery in the treatment of gender dysphoria. *J Craniofac Surg.* 2019; 30(5):1387-92. <https://doi.org/10.1097/scs.00000000000005499>
12. Dubov A, Fraenkel L. Facial feminization surgery: the ethics of gatekeeping in transgender health. *Ame J Bioeth.* 2018; 18(12):3-9. <https://doi.org/10.1080/15265161.2018.1531159>
13. Deschamps-Braly JC. Approach to feminization surgery and facial masculinization surgery: aesthetic goals and principles of management. *J Craniofac Surg.* 2019; 30(5):1352-8. <https://doi.org/10.1097/scs.00000000000005391>
14. Facque AR, Atencio D, Schechter LS. Anatomical basis and surgical techniques employed in facial feminization and masculinization. *J Craniofac Surg.* 2019; 30(5):1406-8. <https://doi.org/10.1097/scs.00000000000005535>
15. Parker K, Naini FB, Gill DS, Altman K. Facial feminisation: an overview of the role of the surgeon and orthodontist. *J Orthod.* 2019; 46(2):148-54. <https://doi.org/10.1177/1465312519840041>
16. Ascha M, Swanson MA, Massie JP, Evans MW, Chambers C, Ginsberg BA, et al. Nonsurgical management of facial masculinization and feminization. *Aesthet Surg J.* 2019; 39(5):NP123-NP137. <https://doi.org/10.1093/asj/sjy253>
17. Raffaini M, Perello R, Tremolada C, Agostini T. Evolution of full facial feminization surgery: creating the gendered face with an all-in-one procedure. *J Craniofac Surg.* 2019; 30(5):1419-24. <https://doi.org/10.1097/scs.00000000000005221>
18. Sayegh F, Ludwig DC, Ascha M, Vyas K, Shakir A, Kwong JW, et al. Facial Masculinization surgery and its role in the treatment of gender dysphoria. *J Craniofac Surg.* 2019; 30(5):1339-46. <https://doi.org/10.1097/scs.00000000000005101>
19. Deschamps-Braly JC. Facial gender confirmation surgery facial feminization surgery and facial masculinization surgery. *Clin Plast Surg.* 2018; 45(3):323-31. <https://doi.org/10.1016/j.cps.2018.03.005>
20. Spiegel JH. Facial feminization for the transgender patient. *J Craniofac Surg.* 2019; 30(5):1399-402. <https://doi.org/10.1097/scs.00000000000005645>
21. Morrison SD, Vyas KS, Motakef S, Gast KM, Chung MT, Rashidi V, et al. Facial feminization: systematic review of the literature. *Plast Reconstr Surg.* 2016; 137(6):1759-70. <https://doi.org/10.1097/prs.00000000000002171>
22. Rocon PC, Sodré F, Rodrigues A, Barros MEB, Wandekoken. Desafios enfrentados por pessoas trans para acessar o processo transexualizador do Sistema Único de Saúde. *Interface (Botucatu).* 2019; 23:e180633. <https://doi.org/10.1590/Interface.180633>
23. Varotto BRL, Massuda M, Nápole RCD, Antequera R. População LGBTQIA+: o acesso ao tratamento odontológico e o preparo do cirurgião dentista - uma revisão integrativa. *Rev ABENO.* 2022; 22(2):1542. <https://doi.org/10.30979/revabeno.v22i2.1542>
24. Macdonald DW, Grosseohme DH, Mazzola A, Pestian T, Schwartz SB. "I just want to be treated like a normal person": Oral health care experiences of transgender adolescents and young adults. *J Am Dent Assoc.* 2019; 150(9):748-54. <https://doi.org/10.1016/j.adaj.2019.03.025>
25. Ardebili ME, Janani L, Khazaei Z, Moradi Y, Baradaran HR. Quality of life in people with transsexuality after surgery: a systematic review and meta-analysis. *Health Qual Life Outcomes.* 2020; 18(1):264. <https://doi.org/10.1186/s12955-020-01510-0>

