


FEMINIZATION OF THE MALE FACE IN TRANS WOMEN WITH HYALURONIC ACID FILLERS: INTEGRATIVE LITERATURE REVIEW

FEMINIZAÇÃO DO ROSTO MASCULINO EM MULHERES TRANS COM PREENCHEDORES DE ÁCIDO HIALURÔNICO: REVISÃO INTEGRATIVA DA LITERATURA

FEMINIZACIÓN DEL ROSTRO MASCULINO EN MUJERES TRANS CON RELLENOS DE ÁCIDO HIALURÓNICO: REVISIÓN INTEGRATIVA DE LA LITERATURA

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ABSTRACT

Facial feminization is an important step in the gender affirmation process for trans women. Hyaluronic acid filler procedures offer a minimally invasive approach to softening masculine features, aligning appearance with gender identity, and contributing to psychological well-being. This integrative review analyzed the literature published between 2018 and 2025 to identify priority anatomical regions, application techniques, and the psychosocial impacts of hyaluronic acid use in trans women. Ten studies were included, including case series, systematic reviews, and clinical guidelines. The results demonstrate clear anatomical differences between male and female faces, highlight strategic regions for fillers, and demonstrate significant psychosocial benefits. The review also identifies gaps in the standardization of specific protocols, suggesting the need for individualized approaches and further research on the topic.

Keywords: Facial Feminization. Trans Women. Hyaluronic Acid. Orofacial Harmonization. Integrative Review.

RESUMO

A feminização facial é uma etapa importante no processo de afirmação de gênero de mulheres trans. Procedimentos com preenchedores de ácido hialurônico oferecem uma abordagem minimamente invasiva para suavizar traços masculinos, alinhando a aparência à identidade de gênero e contribuindo para o bem-estar psicológico. Esta revisão integrativa analisou a literatura publicada entre 2018 e 2025 para identificar regiões anatômicas

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prioritárias, técnicas de aplicação e impactos psicossociais do uso de ácido hialurônico em mulheres trans. Dez estudos foram incluídos, abrangendo séries de casos, revisões sistemáticas e diretrizes clínicas. Os resultados evidenciam diferenças anatômicas claras entre rostos masculinos e femininos, destacam regiões estratégicas para preenchimento e demonstram benefícios psicossociais significativos. A revisão também identifica lacunas na padronização de protocolos específicos, sugerindo a necessidade de abordagens individualizadas e mais pesquisas sobre o tema.

Palavras-chave: Feminização Facial. Mulheres Trans. Ácido Hialurônico. Harmonização Orofacial. Revisão Integrativa.

RESUMEN

La feminización facial es un paso importante en el proceso de afirmación de género para las mujeres trans. Los procedimientos de relleno de ácido hialurónico ofrecen un enfoque mínimamente invasivo para suavizar los rasgos masculinos, armonizar la apariencia con la identidad de género y contribuir al bienestar psicológico. Esta revisión integrativa analizó la literatura publicada entre 2018 y 2025 para identificar las regiones anatómicas prioritarias, las técnicas de aplicación y los impactos psicosociales del uso de ácido hialurónico en mujeres trans. Se incluyeron diez estudios, incluyendo series de casos, revisiones sistemáticas y guías clínicas. Los resultados demuestran claras diferencias anatómicas entre los rostros masculinos y femeninos, destacan las regiones estratégicas para los rellenos y demuestran importantes beneficios psicosociales. La revisión también identifica lagunas en la estandarización de protocolos específicos, lo que sugiere la necesidad de enfoques individualizados y mayor investigación sobre el tema.

Palabras clave: Feminización Facial. Mujeres Trans. Ácido Hialurónico. Armonización Orofacial. Revisión Integrativa.

1 INTRODUCTION

Gender identity is not limited to biological characteristics, but involves the way a person recognizes and presents himself socially (REISNER et al., 2016). For trans women — people assigned as male at birth, but who identify as female — the misalignment between facial appearance and gender identity can cause psychological distress, dysphoria, low self-esteem, and difficulties in social integration (ROCON et al., 2020; SPIZZIRRI et al., 2021).

The face is one of the main social markers of gender. Male facial features can act as barriers to the social recognition of female identity, generating embarrassment, anxiety, and vulnerability to discrimination and violence (SOBANKO et al., 2018; DE BOULLE et al., 2021). Facial feminization, in this context, is not just an aesthetic desire: it represents a fundamental step for psychological well-being, security, and the right to identity (ASCHA et al., 2019; DHINGRA et al., 2019).

There are clear anatomical differences between male and female faces. Male faces usually have more angular contours, prominent jaw and chin, protruding glabella, concave temples, and flatter eyebrows (SUREK, 2019; MACGREGOR; CHANG, 2020). Female faces, on the other hand, exhibit smooth contours, accentuated malar projection, filled temples, less marked jaw, and more voluminous lips, forming a more rounded or heart-shaped facial silhouette (VISCOMI, 2022; DE BOULLE et al., 2021).

In this scenario, the use of hyaluronic acid fillers has stood out as a minimally invasive and accessible strategy to reshape these facial features (TRINH; GUPTA, 2021; DE MAIO et al., 2017). These procedures allow you to adjust volumes, smooth angles, and redefine proportions with predictability and reversibility, offering less invasive alternatives to surgery.

However, there is a relevant challenge: most of the widespread protocols and techniques were developed for cisgender patients, without considering the anatomical and social specificities of trans women (ASCHA et al., 2019; MACGREGOR; CHANG, 2020). This gap makes personalized planning difficult, which can compromise results and safety.

Objective: This study proposes an integrative review of the literature to identify and critically analyze strategies, techniques, anatomical regions, and approaches with hyaluronic acid fillers in the feminization of the male face in trans women. It seeks to consolidate technical subsidies applicable to clinical practice and foster more individualized, safe, and inclusive care.

2 METHODOLOGY

This work is an integrative literature review, a type of research that gathers and analyzes already published studies to understand a given topic more completely. The objective was to identify how hyaluronic acid has been used in the facial feminization of trans women.

Searches for articles were carried out between January and May 2025, using two main databases with free access and full text: PubMed and SciELO. These platforms were chosen for their quality, comprehensiveness, and for providing the complete studies, facilitating a detailed analysis.

To locate the most relevant articles, terms related to the central theme were used, combined flexibly to cover different forms of description of the same subject. Examples of these combinations:

- "Facial Feminization" and "Trans Women"
- "Hyaluronic Acid" and "Facial Filler"
- "Orofacial Harmonization" and "Gender Identity"

These terms were adapted according to the database to ensure that all related studies were located.

After the initial search, the studies were evaluated in stages.

First, by reading the title and abstract, to verify that they addressed the theme clearly.

Then, in full text, to confirm whether they fit the objectives of this review.

Finally, the extracted data were organized into tables to facilitate analysis and comparison.

Table 1

Inclusion and exclusion criteria

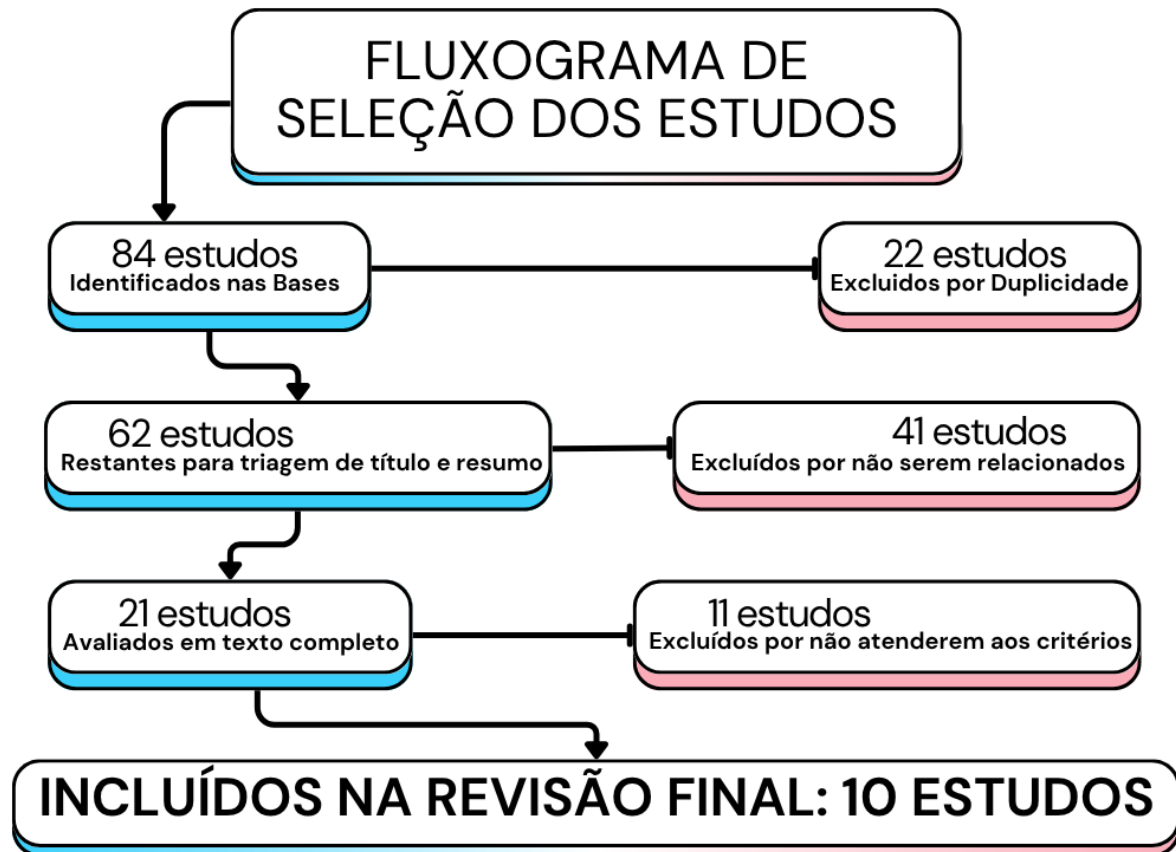
Inclusion Criteria	Exclusion Criteria
Published between 2018 and 2025	Studies focused exclusively on facial surgery
Use of hyaluronic acid in trans women	Opinion pieces, editorials, letters or narrative reviews
Languages: Portuguese, English or Spanish	Cisgender-only populations without analysis for trans women
Full text available in PubMed or SciELO	Studies without access to full text

Source: Authors.

To document the process in a clear and transparent way, a step-by-step selection model was followed, represented in the flowchart below:

Figure 1

Study selection flowchart



Source: The authors (2025).

The selected studies were analyzed considering the year of publication, the type of study, the objectives, the facial regions addressed, the application techniques, the products used, the aesthetic results, and the psychosocial impacts reported.

Table 2

Characterization of the studies included in the review

No.	Author/Year	Title Summary	Study Type	Main Focus
1	Viscomi, 2022	Anatomical modifications and skin quality	Case series	Techniques and results with hyaluronic acid and toxin
2	Ascha et al., 2019	Non-surgical treatment of masculinization/feminization	Narrative review	Non-surgical techniques for facial modification
3	Bernardin et al., 2024	Non-surgical interventions for feminization	Scoping Review	Comprehensive analysis of non-surgical techniques
4	Sun et al., 2024	Trend mapping in facial contouring	Bibliometric analysis	Frequency and trends in orofacial harmonization

5	De Boule et al., 2021	Minimally invasive procedures in transgender people	Review with guidelines	Specific clinical recommendations
6	Plates et al., 2024	Inclusive experience for patients of all genders	Qualitative study	Inclusive service in aesthetics
7	Brown et al., 2021	Psychosocial differences with/without facial injectables	Observational study	Psychosocial impact of fillers
8	Younai et al., 2023	Facial analysis for gender affirmation	Integrative review	Comparative anatomical parameters
9	Dhingra et al., 2023	Aesthetic considerations for transgender patients	Critical review	Aesthetic approach and harmonization techniques
10	Manique, 2023	Facial feminization with hyaluronic acid	Final paper with literature review	Practical protocols for trans women

Source: Authors.

The organization of this information allowed us to consolidate the findings of the literature, highlighting the technical strategies, the priority facial regions for the use of hyaluronic acid, and the social and emotional impacts for trans women, in order to contribute to a more ethical, safe, and personalized clinical practice.

4 DISCUSSION

4.1 ANATOMICAL DIFFERENCES BETWEEN MALE AND FEMALE FACES

When analyzing the anatomical aspects, it is observed that the bone structure of the male face has a wider jaw, a projected chin, and evident supraciliary arches. These elements confer more angular features and, therefore, facial feminization seeks to smooth these areas with hyaluronic acid fillers, fine-tuning angles and rounding contours, resulting in a more harmonic profile (Viscomi, 2022; De Boule et al., 2021).

In the middle third of the face, elevation and greater projection of the malar regions are important markers of femininity. Specific filling techniques reposition the volume in this area, contributing to a more delicate and youthful appearance (Ascha et al., 2019; Bernardin et al., 2024). The lips, traditionally thinner in men, can be volumized, with definition of the cupid's bow, promoting a smoother appearance and consistent with feminine standards (Manique, 2023).

The mandibular line and chin, usually more angular and projected, can be smoothed with fillers or botulinum toxin, reducing hypertrophy of the masseters and rounding the lower contour of the face. In the frontal region, the female pattern features a smoother forehead and arched eyebrows; in these cases, botulinum toxin is a resource to discreetly reposition the eyebrows, favoring the feminization of the look (Dhingra et al., 2023).

In addition to fillers, adjuvant resources such as chemical peels, fractional lasers, and biostimulators are also recommended to improve skin texture, which is traditionally thicker and with pores more evident in the male phenotype (De Boulle et al., 2021). The integration of these procedures enhances the results and contributes to a more complete, safe, and personalized approach to the orofacial harmonization process for trans women.

4.2 STRATEGIC REGIONS FOR FILLING

The review indicated consensus on the main facial areas that require attention in the process of feminization with hyaluronic acid. The malar regions, temples, nasolabial fold, lips, chin, and mandibular contour stand out (Viscomi, 2022; De Boulle et al., 2021).

Malar filling aims to project the cheekbones, creating a lifting effect that contrasts with the flattening or falling associated with masculine features (Bernardin et al., 2024). The volume in the temples helps to correct concavities that generate a more masculine bone contour. The remodeling of the mandibular contour and chin seeks to reduce excessive angulations, resulting in smoother lines. Lip volumization, in turn, reinforces femininity and completes facial harmony (De Maio et al., 2017; Trinh; Gupta, 2021).

These interventions should be planned respecting individual facial proportions, avoiding standardizations that do not consider the anatomical diversity of each patient.

4.3 TECHNIQUES, PRODUCTS AND PROTOCOLS

The reviewed studies demonstrate that the choice of the type of hyaluronic acid and the application technique should consider the density of the product and the specific anatomical objective. Denser products are indicated for areas that require greater projection and support, such as chin and mandibular angle. In contrast, low-viscosity fillers are preferred for lips and superficial areas, allowing for smooth and natural transitions (De Maio et al., 2017; Wollina; Goldman, 2020).

In addition to the proper selection of material, the protocols for facial feminization cover different regions and objectives. In the upper third, the smoothing of the prominent forehead and the discreet arching of the eyebrows can be achieved with the application of botulinum toxin in the frontal and orbicular muscles, promoting muscle relaxation and subtle elevation of the arch. When necessary, fillers are indicated to attenuate the bony projection of the glabella or to provide smooth convexity to the frontal region (Dhingra et al., 2023; Manique, 2023).

In the periorbital region, the application of botulinum toxin in the orbicularis oculi reduces wrinkles in "crow's feet" and the filling of the tear fold minimizes deep dark circles, common in male faces and associated with a tired appearance (Viscomi, 2022; Bernardin et al., 2024). The nose is a central point of feminization; subtle changes can be obtained by rhinomodeling with hyaluronic acid, smoothing small bony humps, elevating the nasal tip, and creating a more delicate contour, while striking structural cases may require a complementary surgical approach (Ascha et al., 2019; Dhingra et al., 2023).

In the middle third, malar projection is one of the most evident markers of femininity. Protocols based on strategic filling points with hyaluronic acid allow volume to be repositioned, while biostimulators can improve skin support in cases of sagging, enhancing the definition of the cheekbones (De Boulle et al., 2021). The lips, traditionally thinner in men, can be harmonized by techniques such as Russian Lips or linear threads, increasing volume, projecting vermilion, and defining cupid's bow. The preservation of naturalness is essential to avoid excess that compromises facial harmony (Manique, 2023).

In the lower third, the mandibular line and chin require careful approach. Botulinum toxin applied to the masseter is effective in reducing muscle hypertrophy and thinning the lower contour, while fillers allow rounding the chin and reducing typical male square projections (Dhingra et al., 2023; Viscomi, 2022). In addition to volumetric remodeling, adjuvant interventions aimed at skin texture enhance the results. Chemical peels even out pigmentation, fractional lasers refine texture and stimulate collagen, and biostimulators maintain the firmness and quality of the skin, thicker and with pores evident in the male phenotype (De Boulle et al., 2021).

The techniques employed include the combined use of needle and cannula, respecting safe anatomical plans to reduce the risk of vascular complications, such as ischemia or necrosis (De Boulle et al., 2021). In addition, the need for detailed knowledge about vascular risk zones and anatomical variations is emphasized to ensure safety and predictability.

Although protocols are increasingly refined, there is still great variation between professionals and geographic regions, demonstrating the need for evidence-based standardization specific to trans women. Each plan must be individualized, respecting the patient's anatomy and expectations. Feminization does not mean standardizing faces, but enhancing feminine features while maintaining naturalness, and it is also essential to evaluate psychological aspects and offer multidisciplinary support when necessary (Brown et al., 2021).

4.4 PSYCHOSOCIAL ASPECTS

In addition to aesthetic results, facial harmonization has a direct impact on the psychological well-being of trans women. Several studies report significant improvement in self-esteem, reduction of anxious and depressive symptoms, and greater safety in social contexts (Brown et al., 2021; Sobanko et al., 2018).

The incongruence between gender identity and facial features can be a source of psychological distress, dysphoria, and social exclusion. The possibility of aligning facial appearance with lived identity is not limited to an aesthetic desire: it is an important step to guarantee the right to identity and full social participation (Ascha et al., 2019; Chapas et al., 2024).

Therefore, the planning of these interventions must consider the expectations, emotional history, and social context of each patient. A welcoming, informed and humanized approach is essential for the success of the treatment.

4.5 GAPS, CHALLENGES AND RECOMMENDATIONS

Despite recent advances, the reviewed studies point to important limitations. Many recommendations are based on cisgender anatomical parameters, without considering the structural or psychosocial specificities of trans women (Ascha et al., 2019; De Boulle et al., 2021). There is a lack of well-defined clinical protocols, research with representative samples, and studies with greater methodological rigor.

It is recommended the development of guidelines adapted to the anatomical and social needs of this population, as well as the inclusion of this topic in the training of orofacial harmonization professionals. Investing in technical training and cultural sensitivity can reduce barriers to access and ensure safer, more satisfactory results that are aligned with patient expectations.

Finally, the need for an ethical and inclusive approach is reinforced, which recognizes the right of trans women to quality care, free of prejudice and that values their identity in an integral way.

5 CONCLUSION

Orofacial harmonization with hyaluronic acid is a minimally invasive, safe, and effective option for facial feminization in trans women. By acting in strategic regions such as the malar, temples, lips, chin and mandibular contour, it is possible to soften male features and promote greater facial harmony, respecting the anatomical differences between genders. Careful product choice and safe technical application are key to achieving predictable and natural results. In addition to the aesthetic benefits, these procedures have a proven positive impact on self-esteem, the reduction of gender dysphoria, and the social integration of patients. However, the literature still lacks specific protocols and robust studies that address the particularities of this population. Orofacial harmonization professionals need to act in an ethical, informed, and welcoming way, recognizing the uniqueness of each patient and offering comprehensive, safe, and inclusive care.

REFERENCES

- Ascha, M., et al. (2019). Nonsurgical management of facial masculinization and feminization. *Aesthetic Surgery Journal*, 39(5), NP146–NP158. <https://doi.org/10.1093/asj/sjy252>
- Bernardin, J., et al. (2024). Intervenções não cirúrgicas para feminização facial de afirmação de gênero: Uma revisão de escopo. *Plastic and Reconstructive Surgery*. Retrieved from PubMed.
- Brown, C., et al. (2021). Diferenças psicossociais entre indivíduos transgêneros com e sem histórico de injetáveis faciais não cirúrgicos. *Aesthetic Surgery Journal*, 41(5), 505–514. <https://doi.org/10.1093/asj/sjaa342>
- Chapas, A., et al. (2024). Oferecendo uma experiência inclusiva para pacientes de todos os gêneros na prática estética: Uma mesa redonda. *Journal of Drugs in Dermatology*, 23(3), 239–243. <https://doi.org/10.36849/JDD.7320>
- De Boulle, K., et al. (2021). Considerations for the use of minimally invasive aesthetic procedures for facial remodeling in transgender individuals. *Clinical, Cosmetic and Investigational Dermatology*, 14, 513–525. <https://doi.org/10.2147/CCID.S299229>
- De Maio, M., et al. (2017). Facial assessment and injection guide for botulinum toxin and injectable hyaluronic acid fillers: Focus on the upper face. *Plastic and Reconstructive Surgery*, 140(2), 265e–276e. <https://doi.org/10.1097/PRS.0000000000003543>
- Dhingra, N., et al. (2019). Medical and aesthetic procedural dermatology recommendations for transgender patients undergoing transition. *Journal of the American Academy of Dermatology*, 80(6), 1712–1721. <https://doi.org/10.1016/j.jaad.2018.07.037>
- Sobanko, J. F., et al. (2018). Prospective cohort study investigating changes in body image, quality of life, and self-esteem following minimally invasive cosmetic procedures.

Dermatologic Surgery, 44(8), 1129–1136.
<https://doi.org/10.1097/DSS.0000000000001527>

- Surek, C. C. (2019). Facial anatomy for filler injection: The superficial musculoaponeurotic system (SMAS) is not just for facelifting. *Clinics in Plastic Surgery*, 46(4), 603–612. <https://doi.org/10.1016/j.cps.2019.06.006>
- Trinh, L. N., & Gupta, A. (2021). Hyaluronic acid fillers for midface augmentation: A systematic review. *Facial Plastic Surgery*, 37(5), 576–584. <https://doi.org/10.1055/s-0041-1724122>
- 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. <https://doi.org/10.2147/CCID.S377510>
- Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing*, 52(5), 546–553. <https://doi.org/10.1111/j.1365-2648.2005.03621.x>
- Younai, A., et al. (2023). Análise facial para afirmação de gênero/Análise facial relacionada ao gênero. *Facial Plastic Surgery Clinics of North America*, 31(2), 229–239. <https://doi.org/10.1016/j.fsc.2022.12.003>
- Wollina, U., & Goldman, A. (2020). Facial vascular danger zones for filler injections. *Dermatologic Therapy*, 33(6), e14285. <https://doi.org/10.1111/dth.14285>