

**UPDATE**

Facial feminization surgery in transsexuals: ethical and forensic reflections

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Abstract

Facial feminization surgeries, which aim to render transsexuals' facial features more feminine, alter soft and hard tissues. These procedures involve ethical issues such as health insurance and public service coverage, and the right to legal name change. Forensic consequences, concerning eventual need to identify individuals who underwent this surgery, are important and require scientific studies. In this article, we analyze some ethical and forensic aspects resulting from facial feminization surgeries.

Keywords: Feminization. General surgery. Gender dysphoria. Sexuality. Forensic Sciences.

Resumo**Cirurgia de feminização facial em transexuais: reflexões éticas e forenses**

Cirurgias de feminização facial, que visam tornar o rosto de mulheres transexuais mais feminino, alteram tecidos moles e duros. Tais procedimentos envolvem inúmeros aspectos éticos, desde a cobertura por planos de saúde e serviço público até o direito à mudança de nome. Há também consequências forenses, no que diz respeito à eventual necessidade de identificar pessoas submetidas a esse tipo de cirurgia. Essas consequências, embora importantes, são pouco consideradas em estudos científicos. Com isso, neste trabalho são analisados alguns aspectos éticos e forenses decorrentes de cirurgias de feminização facial.

Palavras-chave: Feminização. Cirurgia geral. Disforia de gênero. Sexualidade. Ciências forenses.

Resumen**Cirugía de feminización facial en transexuales: reflexiones éticas y forenses**

Las cirugías de feminización facial que pretenden volver más femeninos los rostros de mujeres transexuales producen cambios en los tejidos blandos y duros. Tales procedimientos involucran muchos aspectos éticos, desde la cobertura del seguro de salud y del servicio público hasta las discusiones sobre el derecho al cambio de nombre. Hay también consecuencias forenses en lo que se refiere a las posibles necesidades de identificación de las personas que se someten a esta cirugía. A pesar de su importancia, estas consecuencias son poco abordadas en estudios científicos. Así, en este artículo se analizan algunos aspectos éticos y forenses derivados de las cirugías de feminización facial.

Palabras clave: Feminización. Cirugía general. Disforia de género. Sexualidad. Ciencias forenses.

The authors declare no conflict of interest.

Unique to each individual, the face is fundamental for identity and self-recognition¹. Facial characteristics differentiate one person from the others, portraying evident and unconscious aspects, integrating biological and psychological processes and revealing variables such as age, gender and ancestry². Studies in this area have gained importance³⁻⁵, progressively expanding its scope, ranging from the identification of individuals^{6,7} to cosmetic procedures^{8,9}.

Humanity was already interested in facial aesthetics 4,000 years ago, when the Egyptians tried to define beauty canons¹⁰. Currently, Brazil is one of the countries with the highest rate of aesthetic surgeries¹¹. Procedures such as facial feminization surgery (FFS) are increasingly carried out, given the increase in the prevalence of trans women (approximately 1 in 14,000 assigned male at birth)¹², but there is no exact quantification. According to some studies, this significant increase in the last five decades has been concentrated especially among young adults and individuals over 30 years of age^{13,14}. However, older adults between 60 and 70 years old have also applied for these surgeries¹³.

The growing demand for FFS has raised questions regarding its coverage by health insurance¹⁵⁻²⁰, and coverage by the public service must also be discussed. In Brazil, this procedure is currently not offered by the Unified Health System (SUS). Surgical interventions to acquire new facial patterns can be indicated in different situations, as in cases of reconstruction of mutilated faces due to trauma²¹⁻²³ or pathology. There are also trans women – and, less often, cis women – who desire more feminine features because they believe their faces to be masculine^{8,24,25}.

Facial feminization surgery modifies both soft and hard (bones) facial tissues. Since the face, and especially its bone structure, is an important element for identification – including gender recognition –, surgical changes can have significant forensic consequences. Forensic facial reconstruction is a technique that allows reconstructing facial features based on the replica of an unidentified skull, aiming to enable the recognition of the deceased individual, whose gender, ancestry and age at the time of death need to be previously estimated. After recognition, identification methods are applied^{1,26-29}.

Differences between men and women, young and old have great importance in several areas, especially in reconstructive surgery, which

reproduces anatomical structures appropriate to a specific biological profile. The learning of these variables is essential for the technique of forensic facial reconstruction, to prevent misrecognition³⁰. With the increase in the number of FFS, the quantity of forensic cases in which it may be necessary to estimate, through bones, the gender of people submitted to such procedures also increases, hence the importance of anthropological studies on the modification of bone structures. The absence of data can hinder identification or even lead to mistaken estimates, leading to social, legal and patrimonial losses. In this sense, this article analyzes ethical and forensic aspects resulting from FFS performed in trans women.

Facial feminization surgery

Ousterhout³¹ pioneered FFS, conducting anthropological studies on hundreds of dry skulls to identify resources and specific features of male and female specimens. His findings allowed the development of surgical techniques that appropriately feminized facial features⁵. Most facial features that indicate gender reflect the underlying bone structure; few features are not bony, such as those related to skin, facial hair and hairline⁴.

Women have a more oval face and softer features. Compared to men, the chin is thinner and more pointed, the zygomatic bones are more prominent, the mandibular angles are more subtle and the nasal bones less protruding. Among males, on the other hand, the face is typically more square and angular^{32,33}. Craniofacial points differ between genders in certain characteristics³⁴: some of these points give feminine appearance to the lower two thirds of the face, such as triangulation between the points of the cheeks and the chin³⁵.

The FFS, in turn, is defined as a set of extensive procedures performed on soft and hard facial tissues aiming to give feminine characteristics to male individuals^{4,36,37}. Over the years, many techniques have been developed to alter facial appearance, including reduction of mandibular angle, removal of Bichat's adipose body, maxillary osteotomy and reduction of zygomatic prominence^{4,33,38}. Other common procedures are mentoplasty, which consists of scraping the mental region to thin and shrink the chin (in some cases, an implant is made), and

rhinoplasty, which generally seeks to reduce the nasal dorsum and lift the tip of the nose^{33,38}.

Men's frontal region differs from that of women mainly in the superciliary arch and in the glabella. FFS interventions involve reducing this part of the face, ranging from remodeling the area to displacing the anterior wall of the frontal sinus to the posterior position³³. Another important area is that of the orbits: supraorbital margins are more tapered and less rounded in women. Orbital cavities are also usually smaller and closer in females.

Orbital contouring surgical techniques can achieve these characteristics¹². In addition, there are other procedures with significant impact to determine a feminine appearance^{22,39}, among them hair transplant and scalp reduction³³. Depending on the needs of each patient, these surgeries can be done at once or separately⁴⁰.

Ethical reflections on facial feminization surgeries

The FFS can increase acceptance and improve the individual's social and professional integration^{23,37,41}. The biggest challenges are related to the patient's expectations and the choice of appropriate techniques. In general, the procedures aim to improve the person's appearance without changing their identity. For the patient, undergoing feminization surgeries means starting a new life^{9,23,25,42}.

Dubov and Fraenkel¹⁵ state that FFS is necessary for some transgender people because, in addition to helping with the acceptance process, it reduces the risk of depression and anxiety. Gibson¹⁹ also understands that the procedure includes individuals with gender dysphoria in society. The author adds by calling attention to the State's duty to protect citizens from arbitrary disadvantages and birth accidents – in this case, being born in the “wrong” body¹⁹.

However, one must consider that, like other procedures, FFS can cause complications, which must be informed and explained to the patient before surgery²⁵. Damage to the supraorbital nerves may occur, causing loss of sensation, frontal sinus infections, hematoma and edema in the eyelids and ecchymosis⁵. Adequate clarification, including surgical risks, is an ethical and legal premise, as well as signing the informed consent form^{43,44}.

As much as the goal is to improve the patient's quality of life⁴⁵, it is necessary to consider that aesthetic procedures not only change appearance, but also transform psychological aspects^{9,15,23,25}. Safa and collaborators²⁵ recall that the physical changes resulting from FFS may not meet the person's expectations, causing frustration. Therefore, multidisciplinary work and communication with the patient must be adequate, considering the particularities of each case. As Parker and collaborators⁹ point out, understanding what the individual expects is important so that at the end of the process they feel satisfied. As this procedure is only available on the private network, some people save money all their life to perform the FFS⁴. Expectations are high and cannot be ignored.

In Brazil, gender confirmation surgeries for trans women have been available at SUS since 2008, having been included by the Ministry of Health (MS) Ordinance 457/2008⁴⁶. Eleven years later, Ordinance MS 1,370/2019⁴⁷ extended these surgeries to trans men, authorizing vaginectomy and metoidioplasty. However, the document emphasizes in its article 1 that *this procedure can only be performed on an experimental basis; authorized upon presentation of a research project (...) and registered in the SUS Hospital Information System (SIH/SUS) by university hospitals qualified for specialized care in the reassignment process*⁴⁷.

The Brazilian Constitution, in its article 196, adopts the universal system of access to health, guaranteeing it as a *right of all and duty of the State (...) through social and economic policies aimed at reducing the risk of illness and other hazards and the universal and equal access to actions and services for its promotion, protection and recovery*⁴⁸. Thus, in addition to the debate on FFS coverage by private health insurance that has been taking place in other countries, in Brazil it is pertinent and timely to discuss the inclusion of this procedure in the SUS.

According to the literature on the subject, the 10th edition of the International Statistical Classification of Diseases and Related Health Problems included being transgender in the chapter on mental disorders. However, the 11th edition, published in June 2018, transferred it to the chapter entitled “Conditions related to sexual health,” subchapter “Gender incongruence”⁴⁹⁻⁵¹.

According to the most widespread and accepted definition, health is *a state of complete physical, mental and social well-being, and does not consist only in the absence of disease or illness*⁵². According to Teixeira and collaborators⁴⁹,

the health of the transgender person depends on a political and social environment that guarantees equal rights, social tolerance and full citizenship, and not only adequate clinical follow-up. Thus, one must not forget the bioethical principles of autonomy, beneficence, non-maleficence and justice⁵³⁻⁵⁶, as well as non-stigmatization and non-discrimination^{56,57}.

Gracia^{58,59} points out that the universal principles of common good (non-maleficence and justice) correspond to an “ethics of minimums” and must prevail over individual principles (autonomy and beneficence), which correspond to an “ethics of maximums”. The first corresponds to the “ethics of duty,” the second to the “ethics of happiness”. Cortina⁶⁰ understands that pluralistic societies should be careful in articulating maximums and minimums, to ensure that offers of happiness are not lost, but without trampling on justice.

The *Universal Declaration on Bioethics and Human Rights*, approved in 2005 by the United Nations Educational, Science and Culture Organization at a general assembly of which Brazil was a member, states:

Article 3 – Human dignity and human rights

1. *Human dignity, human rights and fundamental freedoms are to be fully respected.*

2. *The interests and welfare of the individual should have priority over the sole interest of science or society.*

(...)

Article 10 – Equality, justice and equity

The fundamental equality of all human beings in dignity and rights is to be respected so that they are treated justly and equitably.

Article 11 – Non-discrimination and non-stigmatization

No individual or group should be discriminated against or stigmatized on any grounds, in violation of human dignity, human rights and fundamental freedoms⁵⁶.

Santos and collaborators⁶¹ understand that recognizing the right to gender identity is essential for human dignity. The authors also state that all forms of discrimination violate the rights of the person, that is, it disrespects their autonomy. As Godoi and Garrafa state, *the references of human dignity and non-stigmatization and non-discrimination are guiding factors in decisions on the best health policies or practices, and can contribute to difficult decisions involving issues such as: the use of gender confirmation surgery, regarding transgender people⁶².*

Nunes recalls that *there is no consensual view of the terms justice or equity⁶³*. For more than a decade, the Brazilian State has been recognizing the rights of transgender (who identify with a gender other than that assigned at birth⁴⁹) and transsexual people (who seek or undergo transition that may or may not involve hormonal treatment and surgeries⁴⁹). Among the procedures provided for in Ordinance MS 457/2008⁴⁶ are, in addition to gender confirmation (genitourinary system surgery), hormonal therapy, vocal cord surgery for voice feminization and chondrolaryngoplasty to reduce the Adam’s apple.

In June 2018, the Internal Affairs Division of the National Council of Justice approved Provision 73, which in the *caput* of its article 2 states: *Anyone over 18 years of age qualified to practice all acts of civil life may request the change and registration of the first name and gender to the RCPN [Civil Registry of Natural Persons], in order to adapt them to the self-perceived identity⁶⁴*. According to Teixeira and collaborators⁴⁹, in March 2008, the Federal Supreme Court had already authorized such change. The authors consider that norms such as these help to reduce stigmas and encourage the social inclusion of transgender people⁴⁹.

The principles of non-maleficence, justice, autonomy and beneficence, as well as the references of non-discrimination and non-stigmatization, must be considered in the debate on the FFS coverage by the SUS. For now, the process guaranteed by the public system only contemplates gender confirmation, preceded by a two-year follow-up of the patient, performed by a multidisciplinary team that includes psychological assistance^{46,49}. In this sense, the Brazilian legislation already covers procedures related to transsexuality in the right to health established by Article 196 of the Federal Constitution.

Transgender women can opt for FFS without undergoing gender confirmation. Thus, they present themselves socially as women, but maintain male genital organs. Their autonomy must be respected. The FFS is part of the transition; it is not an exclusively aesthetic procedure. Quality of life, regarding mental health, is better in trans women who underwent FFS compared with those who have not undergone any surgical intervention^{9,65}. Incorporating this procedure in the SUS, provided that with prior follow-up by a multidisciplinary team (as it is an irreversible process), would comply with Article 196 of the Constitution.

Forensic reflections on facial feminization surgery

Facial changes, especially bone, can influence possible forensic anthropological studies, especially to estimate gender. When unidentified bones are found, the bone structure is used to establish the individual's biological profile, which corresponds to the estimate of gender, age at death, ancestry and height. In mass graves, or when more than one individual was killed in the same location, it may happen that bones of different people are mixed. In this case, it is necessary to separate the bones in advance – a task often difficult and even unfeasible⁶⁶.

When performing the anthropological analysis to estimate gender, the expert may find female characteristics on the face while observing male characteristics in other bone structures, such as skull base (mastoid process, external occipital bulge), pelvis, femur, tibia, humerus and scapula⁶⁷⁻⁶⁹. This may suggest that the deceased individual was a trans woman, piece of information that helps in the forensic facial reconstruction and the identification process. However, it is also necessary to consider anatomical variations of facial bones, which can present female characteristics even in male subjects. Thus, it is also important that the expert, when faced with situations like the one described, look for evidence (such as bone scars) that the deceased underwent facial surgery.

Identification methods are comparative: one must compare a first record (or *ante mortem* data), which is known to be of the given person, with a second record (or *postmortem* data). If body or bones are found and there are suspicions of the deceased's identity, *ante mortem* data (e.g., dental records) are requested²⁶. However, when a body or skeleton is found and there is no suspicion of who the person is, forensic facial reconstruction can be performed.

The reconstructed face is published in the media to enable recognition. A list of probable identities is then created^{28,70}. If there are suspects, identification methods, such as forensic dentistry or DNA analysis, are applied. For forensic facial reconstruction, tables of facial soft tissue thickness are required to cover the bone structure. These tables are made according to gender, age and ancestry, among other variables^{26,27}, but people who underwent FFS are likely to present changes in the tissue thickness.

Facial and cranial changes of trans people can hinder or even render impossible to identify

post-mortem biological characteristics, particularly when there are no soft tissues. Gender estimates, for example, are based on specific shapes, contours, and measurements, male or female. Concerning trans people, one must examine the skull in detail to detect marks or scars resulting from the surgical process. Once found the complete skeleton, the other bones are also analyzed.

Trans women who underwent FFS generally present themselves socially as female. Thus, they are probably recognized in their midst by the female face. However, in forensic cases, it is unknown how long ago the deceased presented herself as a woman. It may be, for example, that some people recognize only their old male face. To date, there are no studies in the literature that research the forensic facial reconstruction of trans people, but it is suggested that, in such situations, two faces be reconstructed – one with feminine characteristics, made based on the table of tissue thickness for women, and another male, using the table for men. Nevertheless, studies still need to test this method as to verify whether the recognition rate would be significantly altered.

Final considerations

The transgender population is increasing. People undergoing FFS may be victims of fatal accidents or other events where medical-legal identification is required. To date, however, publications in the field of forensic sciences aimed at this group are almost non-existent. As in other fields, trans people must be included, and it is necessary to establish tables of facial soft tissue thickness for individuals undergoing FFS.

It is also important to highlight the ethical aspects aimed at promoting the health of this population and their access to SUS, aiming at the individual's well-being, since changes resulting from surgical processes are not only physical, but also emotional and psychological. In this sense, the bioethical principles of non-maleficence and justice (ethics of minimums) and beneficence and autonomy (ethics of maximums), as well as non-stigmatization and non-discrimination, are pillars on which to build a society that respects differences and guarantees the constitutionally assured right to healthcare. Part of this process involves incorporating facial feminization surgeries in the list of procedures covered by the SUS.

This work was carried out with the support of the Coordination for the Improvement of Higher Education Personnel (Capes). We would like to thank professor Laura Bishop, from the Kennedy Institute of Ethics, Georgetown University, United States, for her assistance and receptivity during Fernandes and Serra's visit, and to Patricia Martin and Roxie France-Nuriddin for their help in the Bioethics Research Library of the same Institute.

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