

Controversies in Sexual Medicine

Is Elective Vulvar Plastic Surgery Ever Warranted, and What Screening Should Be Conducted Preoperatively?

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ABSTRACT

Introduction. Elective vulvar plastic surgery was the topic of a heated discussion on the list-serve of the International Society for the Study of Women's Sexual Medicine. At the suggestion of a board member, it was determined that this discussion might of interest to journal readers in the form of a published controversy.

Methods. Six people with expertise and/or strong opinions in the area of vulvar health, several of whom had been involved in the earlier online discussion, were invited to submit evidence-based opinions on the topic.

Main Outcome Measure. To provide food for thought, discussion, and possible further research in a poorly discussed area of sexual medicine.

Results. Goodman believes that patients should make their own decisions. Bachmann further states that, while that is a woman's right, she should be counseled first, because variations in looks of the vulvar region are normal. Johnson furthers this thought, discussing the requirement for counseling before performing reinfibulation surgery on victims of female genital cutting. Fourcroy emphasizes the need to base surgical procedures on safety and efficacy in the long term, and not merely opportunity at the moment. Goldstein and Goldstein state that, based on the four principles of ethical practice of medicine, vulvar plastic surgery is not always ethical, but not always unethical. Sklar pursues this thought further, pointing out specific examples in regard to the principles of ethics.

Conclusion. Vulvar plastic surgery may be warranted only after counseling if it is still the patient's preference, provided that it is conducted in a safe manner and not solely for the purpose of performing surgery. **Goodman MP, Bachmann G, Johnson C, Fourcroy JL, Goldstein A, Goldstein G, and Sklar S. Is elective vulvar plastic surgery ever warranted, and what screening should be done preoperatively? J Sex Med 2007;4:269–276.**

An interesting flurry of e-mails among participants in the ISSWSHNET chat occurred recently [1]. The issue at hand was the propriety (translation: "political correctness") of performing vulvovaginal plastic surgery on women who are desirous of effecting a change in the appearance and functioning of their external and internal genitalia. Many of the responses were quite parental,

puritanical, and retro-feminist ("... glory in your uniqueness...").

I am a gynecologist, gynecologic surgeon, and perimenopausal practitioner with 35-year practice experience. I have been performing vulvovaginal aesthetic surgery for many years, initially reconstructions of sometimes pretty horrific lacerations of both vagina, introitus, and vulva secondary

to stellate lacerations during the many years that I practiced obstetrics and backed-up nurse midwives.

Secondary to requests from my gynecologic patients with redundant labia at or above the large range of normality and/or with widened, relaxed, or gaping perineum or vaginal vaults, I began performing labial reduction (“labioplasty”), perineoplasty, and vaginoplasty several years ago, and presently do 1–3 per month. My experience, working with many women requesting vulvovaginal alterations, is this.

Cosmetic surgery is an opportunity for people to make a physical change in their appearance to correct a (sometimes self-perceived) defect, change how they look, etc., to either correct a physical problem, enhance their self-esteem, or look better in their clothes, etc. [2–4]. **THIS IS THEIR DECISION TO MAKE, NOT MINE.** My responsibility is to make sure the person: is psychologically stable; is doing it for the right reasons (not to “keep her boyfriend,” etc.); fully understands the procedure, its risks, and recovery time; understands that the outcome may not be exactly up to her expectation; and has the opportunity and time to make a truly informed decision.

If a man decides to get Botox, if a person decides upon a rhinoplasty to correct what he or she feels is a “deformed” nose, and if a woman decides on a breast augmentation to fit better in her clothes or enhance her self-esteem, few would take issue. But many cringe when vulvovaginal aesthetics are discussed. I think a very paternalistic and chauvinistic attitude is displayed when this work is rejected out of hand.

Like noses and breasts, vulvae and vaginas come in a wonderfully varied array of sizes, shapes, and colors. There is a wide range of normality and I make sure my patients understand this. Given that, many patients reasonably decide that they want surgery. My responsibility then is to provide the best care possible and to take the time to objectively assess the patient’s motives, understanding, and emotional stability.

Many pejorative remarks have been made about the propriety of the procedure of hymenal reconstruction or “hymenoplasty.” Patients exhibit many different reasons for their request, many of them cultural. A good hymenoplasty can be very difficult to do. The tissue is often thin and friable; it is often difficult to get mucosal

surfaces to align exactly as wished, and fibrin glue does not work well on mucosal surfaces. Because the purpose frequently is “to be tight and bleed,” an effective procedure is often the opposite of the meticulous surgery we would hope for: remove a wedge, retighten, and hope for as much scar tissue as possible to produce tearing and bleeding with next coitus. Egad! Not the type of surgery I’d like—but maybe just what the patient wants!

It is imperative that the surgeon takes the time to get to know her or his patient and her reasons, desires, and exact expectations; not “You want it done? . . . Let’s book it for next week!” Proper preoperative preparation includes: negotiating exactly what your patient wishes and how close you can come to accomplishing this, reasonably expected outcomes, exact and clear recovery times and instructions, and a clear understanding of risks and the possibility that results may not be exactly up to expectations.

When time is taken preoperatively and the procedure is performed carefully, I have found my patients uniformly happy with their decisions and the outcome.

Michael P. Goodman, MD

Like it or not, cosmetic procedures conducted to alter body shape and contour are a fact of life! Statistics confirm its widespread appeal—in 2005, more than 10.2 million cosmetic plastic procedures were performed in the United States, with 1.8 million of them surgical cases and 8.5 million of them minimally invasive cases such as Botox injections and chemical peels [5]. Compared with the number of procedures from the year before, this was an increase of 11%. Unfortunately, these procedures are often confused with reconstructive plastic surgery procedures, which are conducted to improve function and/or appearance of abnormal body areas that result, either congenitally, from tumor excision, lacerations, accidents, and other morbid circumstances.

For women who wish to have cosmetic reconstruction of the external genitalia, there is no valid reason to deny them this right. Female genital reshaping falls into the same category as liposuction, nose reshaping, breast augmentation, eyelid surgery, a tummy tuck, or any other cosmetic alteration of the body.

However, vaginal cosmetic surgery, often referred to as “rejuvenation” surgery, should be

performed only when the woman has been counseled that she is opting for a purely cosmetic surgery and not a reconstructive plastic surgery.

Therefore, I firmly believe that, preoperatively, the woman should be clearly told that excessive labial tissue or prominent labia minora are variations of normal genital anatomy and do not impair genital function. For example, it should not be inferred that labia minora are abnormal if they protrude through the labia majora, and that this condition will lead to sexual dysfunction, future problems, or pathology. Language should be avoided that infers that the labia minora, labia majora, clitoral hood, or the mons pubis are misshaped or ugly and, through surgery, can be “restored” to be more appealing in size and shape. The woman should be clearly told that she is having cosmetic surgery, to make the area more pleasing to her and/or her partner, and that she is not having vulvar reconstruction, which denotes surgery for abnormal function.

Gloria Bachmann, MD

Cosmetic beautification, the quest for the perfect body image, is not a new phenomenon; however, the surgical utilization of this desire has exploded. Is there a desperate quest for physical transformation—transformation to the dream world? [6,7] I cannot deny the right of a woman (or perhaps the couple) to seek what is thought to be in that culture a perfect body. After all, I have long since given up what could be my normal hair color, and make great efforts to make my teeth conform to cultural standards but fixing my genitalia? Clearly, we are in the botox era, where perfection to fit someone’s norm and an opportunity to make money set the standards. The prevalence of labia measurably outside the norm is small. But there are women with labial hypertrophy that results in both hygienic and sexual problems [8]. It is also clear that labial reduction is a safe, simple procedure that can be performed under local anesthesia and on an outpatient basis with minimal sedation [8,9].

Most of the body beautification schemes are built on cultural expectations. The best examples are female genital cutting and hymnography [10,11]. Both of these procedures are built on centuries of misinformation. Hymnography is illegal in most Arab countries, but it is performed unofficially; specialists undertake five or six procedures weekly. The trade in hymen repairs, justifiable in

certain circumstances, when the woman would otherwise suffer disgrace or worse [12–14]. We also have polysurgical addicts who may undergo repeated surgical transformation from the top (face) to the bottom. One should ask whether the use of these techniques is truly justified. In other words, are these procedures both safe and efficacious? It is important to make sure our surgical procedures are based on sound evidence. I suspect most are opportunistic procedures developed to make money, and none have looked at the long-term health outcomes. It is important to make sure the women undergoing these procedures understand the risks and benefits associated with the magic of perfection.

Jean L. Fourcroy, MD, PhD, MPH

There is a raging debate regarding the juxtaposition of the traditional cultural practice of female genital cutting with elective genital cosmetic surgery performed commonly in western societies. Female genital cutting has achieved global attention due to the increasing influx of immigrants and refugees from indigenous countries to Europe and North America. The World Health Organization (WHO) estimates that 140 million women worldwide have undergone a form of female genital cutting, and each year 3 million girls are at risk for the procedure [15]. The WHO defines female genital cutting as “all procedures involving partial or total removal of the external female genitalia or other injury to the female genital organs whether for cultural, religious or non-therapeutic reasons” [16]. This definition, however, fails to distinguish the traditional practice of female genital cutting (often performed out of love and societal pressures to preserve a woman’s family honor, respect, chastity, marriageability, and beauty) from elective vulvar plastic surgery (often performed for aesthetics, to promote mental, physical, and sexual well-being) [17]; wherein lies the controversy as to whether such procedures are ever warranted.

As a health and human rights violation, female genital cutting has been the subject of increasing legislation worldwide [18]. In 1996, the U.S. Congress enacted a federal law criminalizing the performance of female genital cutting on minors (less than age 18). However, the law does not address re-infibulation (the re-approximation of the raw edges of tissue opened during childbirth, recreating the original “infibulation”—which is

the most severe form of female genital cutting involving excision of the clitoris, labia majora, and/or minora with re-approximation of the cut edges producing a narrow neo-introitus). If a woman requests re-infibulation after delivery, this should only be performed after extensive counseling and at the discretion of the healthcare provider after a thorough discussion of the medical risks and cultural relevance of this procedure to the woman. Elective defibulation (opening of the prior female genital cutting scar) is warranted in women who desire this procedure performed before either marriage or childbirth, and/or to alleviate the long-term complications and sexual morbidity associated with infibulation. If performed during pregnancy, defibulation should be performed in the second trimester or at least 4–6 weeks before delivery to facilitate intrapartum fetal monitoring, pelvic exams and reduce obstetric complications. Elective clitoral reconstruction may also be warranted in women who have undergone female genital cutting to improve sexual function [19,20].

Preoperative screening guidelines for circumcised women desiring elective vulvar plastic surgery should include a detailed history and physical examination, including appropriate documentation of the type of female genital cutting present and exploration of the cultural significance to the woman and medical sequelae experienced. An interpreter should be present, along with the woman's partner/spouse to aid in medical decision making. Visual aids/diagrams illustrating vulvar anatomy should also be incorporated, and women should be counseled on the risks, benefits, and expectations postoperatively (i.e., change in urinary stream postprocedure). Primary female genital cutting should be discouraged, and a discussion of the legal ramifications of performing female genital cutting in women/girls under age 18 should also ensue. Future efforts must aim to further classify and/or distinguish traditional female genital cutting from genital cosmetic surgery.

Crista Johnson, MD

Labiaplasty (labia minora reduction, nymphectomy) has been discussed in the peer-reviewed medical literature since 1971. However, early reports of this procedure consisted of correction of labial hypertrophy caused by congenital malformation, exogenous hormones, myelodysplasia, and

manual stretching of the labia with weights (a practice of the Khoikhoi tribe in south-western Africa) [21]. In 1984, Hodgkinson and Hait were the first to discuss this procedure performed for purely aesthetic reasons [22]. More recently, while there are no published statistics from either the American Society of Plastic Surgeons or the American College of Obstetricians and Gynecologists, it has become apparent in the lay press that "this surgery is one of the fastest growing" areas of plastic surgery [23]. Unfortunately, there has been no discussion in the peer-reviewed medical literature that addresses the biomedical ethical issues surrounding this procedure [11].

Therefore, the authors of this article (a gynecologist specializing in the treatment of vulvar disorders with experience performing this procedure [A.G.], and a dermatologist with an advanced degree in medical ethics, who performs aesthetic procedures [G.G.]) thought it necessary to examine this procedure through the lens of established and accepted principles of biomedical ethics to offer guidelines for physicians who might consider performing this procedure.

The four medical ethical principles applicable to this discussion are: *autonomy*, *nonmaleficence*, *beneficence*, and *justice* [24]. However, it is important to recognize that each of these four principles are not given equal weight when making medical decisions.

- *Autonomy*: It is an established medical and legal principle that an adult person without mental impairment has the final decision with regards to any medical procedure he or she receives. It is the principle of autonomy that is most commonly used to justify cosmetic surgical procedures (i.e., if a woman decides that she would feel better if a perceived physical deficiency is corrected, she should be allowed to have this procedure). While autonomy can be used to justify performing this surgery, several obstacles must be overcome to convince the surgeon that the patient is acting completely autonomously. First, the patient must not have any mental impairment. While the authors feel that it is paternalistic to require every prospective patient to have a psychological evaluation, the surgeon must be convinced that she has no evidence of depression, anxiety, or body dysmorphic disorder. A history of prior cosmetic procedures will alert the physician of the possibility of a

psychiatric disorder that must be addressed prior to agreeing to perform the surgery. Second, the patient must be free of any outside coercive influences. The surgeon must be certain that the prospective patient is not being convinced to have this surgery by a sexual partner, theatrical agent, etc. Third, in order to act autonomously, the patient must be completely aware of the true risks of this surgery (discussed in more detail below). Lastly, the patient must be free of any coercive influences by the surgeon. This type of coercion can begin even before a patient's first visit with a surgeon if the surgeon advertises this type of procedure. A recent Committee Opinion from the American College of Obstetricians and Gynecologists stated that terms such as "top," "world-famous," and "pioneer" are usually misleading and are designed to attract vulnerable patients [25]. In addition, the same guidelines state that there must be a complete disclosure of any restrictive commercial agreements that allow a surgeon to claim unique skills or unique treatments such as *Designer Laser Vaginoplasty*TM. Additionally, claims of "scarless," "painless," or "bloodless" procedures are not justified, as the surgeon cannot truthfully ensure the patient of these results in every instance.

- *Nonmaleficence*: The ethical principle *primum non nocere* (first do no harm) is *prima facie* binding, and is therefore a greater ethical principle than beneficence (to do good). Therefore, any procedure that has a greater chance of harming a patient than helping her is unethical. The majority of reports of labiaplasty are small case series or case reports and therefore the true complication rate associated with this procedure is unknown. The authors of a large case series of 163 patients reported "no significant complications" with this procedure; however, they report that 20% of the patients reported that the surgeon did not adequately explain the procedure and the results to expect, 17% found the results to be unsatisfactory, and many patients experience transient postoperative pain and dyspareunia [26]. In addition, while not reported in the literature, one of the authors of this article (A.G.) has seen persistent vulvar pain (dysesthetic vulvodinia) as a direct consequence of labiaplasty that required treatment with amitriptyline for almost 1 year to treat neuropathic pain. Lastly, the principle of nonmaleficence

allows any surgeon to refuse to perform labiaplasty if he or she feels that it is not in the best interests of the patient.

- *Beneficence*: The majority of peer-reviewed literature regarding labiaplasty suggests that most women undergo the procedure purely for cosmetic results. However, additional motives for requesting surgery include: discomfort in clothing, discomfort when taking part in sports, and dyspareunia from invagination of the excess labial tissue during penetration [26]. Therefore, in order for a surgeon to benefit the patient by performing labiaplasty, the patient must get the functional and cosmetic results that she expects. Thus, the surgeon must know the proper surgical techniques and have enough experience with the procedure to adequately reassure a prospective patient that her results will meet her expectations. A review of the available literature suggests that simple excision of the excess labial tissue and oversewing the edges give an inadequate cosmetic and functional result. Several authors have suggested that wedge resection gives good cosmetic results [21,26]. However, other authors have suggested that the suture lines on wedge resection are under tension, which may lead to wound dehiscence or narrowing of the introitus [2,27]. Giraldo and colleagues have suggested that a 90-degree Z-plasty gives better functional and aesthetic results [2]. Regardless of technique utilized, it is essential that the surgeon have adequate experience performing this procedure. As most gynecologists have not been taught this procedure in their residency training, it is imperative that the surgeon has adequate hands-on training under direct supervision before performing the surgery on his or her own. The authors want to emphatically state that the old axiom "see one, do one, teach one" does not represent adequate training for this procedure. Clearly, if a surgeon has not had sufficient training in this procedure, he or she would be acting in a nonbeneficent (unethical) manner by performing the procedure.
- *Justice*: The ethical principle of justice implies that the resources of society are utilized for the greater good of society. In medical ethics, the principle of justice suggests that everyone is entitled to a "decent-minimum" of health care. When labiaplasty is performed for aesthetic reasons, and the cost of the operation is born

solely by the patient, the issue of justice is not especially applicable (although one might argue that the doctor, having used society's resources when getting medical training, should use his or her skills in a more "useful" manner). However, in countries where medical resources are rationed, the principle of justice does apply. The authors would suggest that, in this situation, only the most extreme cases of labial hypertrophy would warrant labiaplasty. More importantly, the principle of justice should prevent any physician from suggesting to a third-party payer (i.e., insurance company or government) that there is a medical indication for the procedure to obtain monetary coverage in situations where aesthetic concerns are the main motivation of the patient.

In conclusion, we have attempted to examine the labiaplasty within the construct of established medical ethical principles. After applying these principles to this procedure, it is apparent that performance of this procedure is not always ethical, nor it is always unethical. Therefore, it is the surgeon's burden to be aware of the ethical principals involved and to practice well within the boundaries of ethical conduct. Lastly, while this article has only examined the medical ethical issues surrounding labiaplasty, the same principles can be applied to other vulvovaginal cosmetic procedures, such as "vaginal rejuvenation" and "hymenoplasty."

*Andrew T. Goldstein, MD and
Gail R. Goldstein, MD, MA*

To answer the question of whether elective vulvar plastic surgery is ever warranted, it is important to put aside emotional reactions and go back to look at basic ethic issues. Beauchamp and Childress [24] outline four basic groups of principles—respect for autonomy, beneficence, nonmaleficence, and justice (which is too broad a topic to cover here).

One of the bases for autonomy of patient choice is the freedom of the patient from controlling influences [24]. Although the choice of genital alteration is presented as empowering for women by the media, such a decision must be viewed in the context of relationships and socialization which are in many ways limiting for women. The influence of the media and societal ideals impose pressure on women to alter their appearances.

At the current time, there is no definition of what constitutes normal labium minora length. Freidrich [28] stated that a maximum horizontal length of 5 cm or less from medial to lateral border was the normal length. In some of the plastic surgery literature, 3 cm is now considered the upper limit of normal length [29]. To distinguish between the two aspects of plastic surgery—cosmetic and reconstructive [30], the American Medical Association states: "Cosmetic surgery is performed to reshape normal structures of the body in order to improve the patient's appearance and self-esteem. Whereas reconstructive surgery is performed on abnormal structures . . ." [30,31]. This lack of consensus in the professional world translates into confusion for patients whose ideals for vulvar appearance are imagined or based on images seen in the pornographic literature. One physician even encourages his patients to use Playboy magazine as a guide for their desired vulvar appearance [17].

Beneficence refers to the contribution a physician makes to a patient's welfare [24]. This means contributing to a patient's health. Numerous studies use the patient satisfaction ratings as a gauge of benefit [32,33]. This, however, converts the goal of medicine from healing to patient happiness. While there have been cosmetic surgery studies showing improvement in patient interpersonal relationships and sexual function with a decrease in depression [34], this still remains to be shown for genital altering surgeries. The study by Berman and colleagues on genital self-image, although it shows increased desire correlating with positive genital self-image, does not translate to improved relationships or improved sexual function [35].

Nonmaleficence is the obligation to "do no harm" in the treatment of patients [24]. One study of labial reconstruction on women with symptomatic labial hypertrophy described a 23.8% complication rate with complications such as flap necrosis [29]. Is this an acceptable rate for a procedure which is performed on normal structures?

At the heart of the physician-patient relationship is the fiduciary nature of the relationship. "Both law and medical tradition distinguish the practice of medicine from business practices that rest on contracts and marketplace relationships. The patient-physician relationship is founded on trust and confidence" [24]. "If the only indication for a medical procedure were the wishes of the

patient, medical technology could be used to gratify almost any whim" [32]. In this largely market-driven part of cosmetic surgery, what will be the limiting factor for physicians who perform these surgeries?

Thus, patient autonomy and technological advancement have been linked together in a business proposition, where the patient is able to choose a procedure and, if she has the money, obtain it if there is a physician willing to provide the technology. Does this reflect the true nature of the practice of medicine and of the physician-patient relationship? I would argue no.

Susan Sklar, MD

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