

## Female Cosmetic Genital Surgery

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Genital plastic surgery for women has come under scrutiny and has been the topic of discussion in the news media, online, and in medical editorials. In the absence of measurable standards of care, lack of evidence-based outcome norms, and little standardization either in nomenclature or training requirements, concern has been raised by both ethicists and specialty organizations.

Some women request alteration of their vulvas and vaginas for reasons of cosmesis, increasing self-esteem, and improving sexual function. Patients must be assured their surgeon is properly trained and should understand that few validated long-term safety or outcome data are presently available in this relatively new field. Women also should be made aware that, although they may wish to cosmetically or physically alter their external genitalia, this does not mean that they are developmentally or structurally "abnormal." It is important that training guidelines for practitioners be established and that long-term outcome, psychosexual, and safety data be published. The genital plastic surgeon must have sufficient training in sexual medicine to withhold these procedures from women with sexual dysfunction, mental impairment, or body dysmorphic disorder. In an atmosphere in which trademarked marketing terms are becoming part of the lexicon, a more descriptive terminology is suggested, incorporating the terms "labiaplasty," "reduction of clitoral hood," "perineoplasty," "hymenoplasty," and "vaginoplasty." The term "female cosmetic genital surgery" is presented as a descriptive umbrella encompassing these genital plastic procedures.

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Elective cosmetic surgical and nonsurgical procedures have been with us for thousands of years; the many forms of cosmesis have an established place

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in the lexicon of appearance and functional improvement.

As women become more comfortable with the idea of elective procedures on their faces, breasts, and skin, designed to enhance their appearance and self-confidence, it is not surprising that they may wish to alter, change, "rejuvenate," or reconstruct even more intimate areas of their bodies.

In 1984, Hodgekinson and Hait were the first to discuss genital surgical alterations performed for purely esthetic reasons.<sup>1</sup> Although 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 esthetic surgery of the vulva and vagina is being performed with increasing frequency. Keeping pace with women's requests and in the absence of official training programs, certification, and nomenclature, it is concerning that we are witnessing a proliferation of physicians, programs, and procedures touting, often without proof of validity, success of both improved appearance and sexual function. In the absence of legitimacy and training, oversight, and commonly accepted nomenclature, vividly descriptive terms such as "revirgination," "designer laser vaginoplasty," and "vaginal rejuvenation," thrive and multiply and may soon (if not already) become part of the vernacular.

In his editorial in the May 2008 issue of *Obstetrics & Gynecology*,<sup>2</sup> Douglas W. Laube, MD, MEd, addresses but does not answer issues involving scope of practice, ethics, education, finances, and practice considerations.

Esthetic surgery of the vulva and vagina has not been described as such nor sanctioned by specialty organizations. Some would go so far as to describe it as experimental. I disagree. The operations themselves are not new; what is new is the concept that women may wish to alter their genitalia for reasons of potential improvement of appearance or function. However, because any surgery has great potential for causing pain and distress if not performed properly, and especially because genital plastic surgery involves concepts and procedures that are not yet fully researched nor understood, stringent guidelines for

training, anesthesia, surgical technique, and postoperative monitoring, among others, should be established.

The goal of this article is to endeavor to bring some cohesion to this emerging and essentially unregulated area of women's health care. Its purpose is to: 1) recognize the right of women to seek cosmetic and functional alteration of their external genitalia and vaginas, 2) frankly discuss ethical considerations and patient evaluation requirements, 3) suggest safeguards to protect patients from unrealistic expectations and unethical or poorly trained practitioners, 4) suggest training requirements for professionals, and 5) begin to define and establish a legitimate nomenclature.

## RECOGNITION

Cosmetic surgery is theoretically an opportunity to make a physical change in one's appearance to correct a (sometimes self-perceived) defect or physical problem, enhance self-esteem, look better in clothes, and improve personal assessment of one's sexual functioning, among other reasons.<sup>3-6</sup>

Cosmetic procedures designed to alter body shape and contour are a fact of life. It can be argued that female genital reshaping falls into the same category as liposuction, rhinoplasty, breast augmentation, abdominoplasty, and other cosmetic alterations.<sup>3</sup>

There has been an avalanche of publicity about labiaplasty and other vulvovaginal esthetic surgical procedures. Some call it labial or vaginal rejuvenation, female cosmetic genital surgery, or vulvovaginal esthetic surgery. These procedures and their credibility have touched a nerve in the medical community. Indeed, at a more basic level, the medicalization (and, by extension, the surgicalization) of sexual behavior, where surgery and drugs are used to enhance sexual pleasure, has been decried.<sup>7</sup> Indeed, the professionalism of the physicians performing these procedures and the ethics and propriety of the procedures themselves have been called into question.<sup>8</sup>

## ETHICAL CONSIDERATIONS

To answer the question whether elective vulvar cosmetic surgery is ever warranted, it is necessary to examine these procedures through the lens of established and accepted principles of biomedical ethics: respect for autonomy, beneficence, nonmaleficence, justice, and veracity.<sup>9</sup> This has been done well by Andrew T. Goldstein, MD, and Gail R. Goldstein, MD,<sup>3</sup> and many of their ideas follow.

## AUTONOMY

The principle of autonomy is used commonly to justify cosmetic surgical procedures. Although autonomy may be used to justify female cosmetic genital procedures, the surgeon must be convinced that the patient is acting completely autonomously. She must have no mental impairment, no evidence of depression, anxiety, or body dysmorphic disorder. She must be free of any outside coercive influences (eg, from a sexual partner) and must be completely aware of the risks of surgery and free of any influence, covert or overt, from the surgeon. Provider coercion can begin even before the patient's first visit via marketing that promises a "designer vagina" or appearance "like a Playboy model" and touts the surgeon as "world famous" or "a pioneer" or uses misleading proprietary terms.

It is the obligation of the surgeon to inform the patient fully regarding treatment options and the potential risks and benefits of these options. Once the physician is satisfied that the patient fully comprehends the options, the patient's autonomous decision ordinarily should be respected and supported.

## NONMALEFICENCE

Any procedure that has a greater chance of causing harm than good (*primum non nocere*) is unethical. Toward this end, it is important to note that there are very few long-term, peer-reviewed data regarding safety and cosmetic, functional, and psychosexual outcomes of genital cosmetic procedures. The few reports available to date list no serious complications,<sup>1,10-14</sup> but most refer only to labiaplasty. These reports equivocate when it comes to questions of adequate explanation and understanding of outcome and sidestep definitions of "normality" when it comes to potential clients, who pay significant monetary sums for their procedures.

It is important for those in the medical community performing these procedures to follow established guidelines to theoretically ensure proper guidance, informed consent, psychosexual screening and counseling, and safe performance of the procedure. It is the surgeon's responsibility to make sure that his or her patient is psychologically stable and not being coerced, that she fully understands the procedures, risks, recovery times, and restrictions, and that she understands that outcomes may not be exactly up to her expectations and that she has the opportunity and time to make a truly informed decision. Additionally, the surgeon should inform the patient about presently limited outcome data regarding the safety and efficacy of these procedures.

## BENEFICENCE

The principle of beneficence refers to the ethical obligation of the physician to promote the health and welfare of the patient. For the surgeon to benefit her or his patient, the patient must receive the functional and cosmetic results she expects.

The literature<sup>3-6</sup> as well as anecdotal experience from many genital plastic surgeons suggest that women undergo these procedures for purely cosmetic reasons, because of discomfort in clothing or when taking part in sports, because of invagination of excess labial tissue during coital penetration, and because of lack of sensation, "gripability," and "feeling loose," with resultant diminished pleasure during lovemaking.

The surgeon must know the proper surgical techniques and have sufficient experience with the procedure to adequately reassure a prospective patient that her results will meet reasonable expectations. To be reassured, the patient must reasonably expect that her surgeon has been adequately trained and supervised and has had experience adequate to perform the specific procedure she will be undergoing.

## JUSTICE

The ethical principle of justice implies that the resources of society are used to the greater good of society. In medical ethics, this suggests that everyone is entitled to a decent minimum of health care. Because the costs for elective cosmetic surgery are borne solely by the patient, the issue of justice is not especially applicable. However, in a situation in which medical resources are rationed and resources needed for the greater good are directed to cosmetic/comfort surgery, the principle of justice theoretically does apply. Importantly, the principle of justice should prevent any physician from suggesting to a third-party payer that there is a medical indication to obtain monetary coverage in situations in which esthetic concerns are the main motivation of the patient.

## VERACITY

Veracity, or truth telling, is important in surgical counseling and decision making. The surgeon must not represent his or her patient's anatomy as abnormal. These procedures must not promote a more normal appearance. There is no "normal," and surgeons must emphasize this and must be clear regarding the present lack of scientific evidence and safety data regarding these procedures.

The surgeon must be honest regarding potential outcome, effects on sexuality, and potential complications and should not misrepresent his or her experi-

ence with the proposed treatment or knowledge regarding potential long-term outcomes.

## PATIENT PROTECTION

At the present time, the field of female cosmetic genital surgery is like the old Wild, Wild West: wide open and unregulated. In this environment, the patient is afforded little protection when there exists no specialized training or experience requirements.<sup>2</sup> Outcome studies (physical, functional, social, sexual, and psychological) to guide both surgeon and prospective patient are few in number and small in size and generally do not discuss psychological and sexual ramifications.<sup>4,11-14</sup>

American College of Obstetricians and Gynecologists Committee members, as evidenced in their Committee Report No. 378,<sup>8</sup> take issue with what they see as unsubstantiated claims inherent in the promises of enhanced sexual gratification with procedures such as "vaginal rejuvenation" and "designer laser vaginoplasty" in the absence of adequately powered outcome data.

For patient protection in addition to expecting the application of the ethical principles previously discussed, patients have the right to expect that their surgeons have had a proper level of training and experience to perform the agreed-on procedure. They should know the expected outcomes of their procedures, alternative surgical techniques available, expected complications, and rates of (mal)occurrence, so as to be able to choose what they wish done based on a knowledge of the procedure and known complication rates.

Some risks (eg, overtightening of the introitus through perineoplasty, risks of bowel or bladder entry or risk of producing incontinence by alterations of the anterior or posterior compartments in vaginoplasty, infection, poor wound healing) are known and must be discussed with the patient.

Because these procedures are relatively new and the literature investigating outcomes and risks relatively sparse, the possibility of other untoward outcomes must be discussed candidly. In my experience, patients look on this surgery as relatively risk-free and do not expect much discomfort nor a difficult recovery. The fact that these are serious surgical procedures, that recovery may be protracted, and that the risks are potentially significant must be shared.

This is admittedly difficult given the paucity of evidence-based outcome data available. However, patients are requesting these procedures, and they are being performed. Presently, in the absence of adequately powered multicenter data, all that can be ex-

pected is that surgeons collate their results, take note of the results of the small, single-practice studies available, and refer to these procedures as relatively new and untested.

Many patients seeking cosmetic genital surgery perceive themselves as abnormal, unattractive, or deformed. Clear and direct information must be provided to each patient regarding the wide range of anatomic normality and that they fall within this range. Given this, patients still may reasonably wish to alter their appearance.

Each patient seeking a cosmetic genital procedure should be evaluated, either by the use of an approved instrument (eg, the Arizona Sexual Experience Questionnaire, Female Sexual Function Index) or by a general set of uncovering questions. Patients with sexual dysfunction should be further evaluated, either by the operating surgeon if she or he is trained in this evaluation or through referral to a qualified sexual medicine practitioner for resolution before surgery. Patients with serious sexual dysfunction should not undergo these procedures.

The patient should be made aware that the procedure she is to undergo is basically for cosmetic and self-esteem reasons. Although it may be reasonable to expect that there may be positive effects on sexual function, this result should not be touted or guaranteed.

A consent form should be part of the preoperative process and should include information about the procedure, short-term and long-term recovery, known and potential complications, and inability to guarantee the expected outcome, as well as a disclaimer regarding inability to guarantee beneficial effects on sexual functioning and enjoyment.

It is anticipated that minimum standards of competence and training will be established and that the medical professionals who perform these procedures will publish their outcome statistics. Surgeons should not give the impression that these procedures are universally accepted or routine and should approach them with the same respect and caution as any other surgical procedure on the female genitalia.

### TRAINING GUIDELINES

As previously noted, patients have the right to expect that their surgeons have a known minimal level of training and experience. Patients reasonably can expect, if their surgeon has completed an approved obstetrical-gynecological residency program, that she or he is experienced in vaginal and perineal repairs and fully understands the anatomy of the pelvis. If the surgeon has not completed an obstetrical-gynecological residency, whether a general, urological, or plastic

surgeon, it is important for these physicians to be adequately trained in vulvar and vaginal anatomy and the intended surgical procedure(s), and patients should understand their surgeons' professional training and background.

In either case, a surgeon embarking on a procedure should have specific expertise in the procedure he or she will perform, either secondary to previous performance of an adequate number of cases or through completion of an approved training course followed by proctoring. The makeup of these courses, the number of hours required, and course content are not something we as a profession necessarily can legislate, but it is the goal of this article to stimulate formation of a group of peers to agree on acceptable standards of care and training requirements. I anticipate that such requirements will specifically include sexual medicine training sufficient to enable the cosmetic genital surgical practitioner to evaluate the sexual health of his or her patient and to be able to uncover sexual dysfunction that may masquerade as a surgical request.

### DEFINITIONS AND NOMENCLATURE

An acute need exists to develop a reasonable nomenclature to replace proprietary terms such as "vaginal rejuvenation," "designer laser vaginoplasty," "revirgination," and "G-shot" before they become entrenched in the rubric of medical and lay terminology. No specific term is accepted to describe these procedures, although genital plastic surgery, cosmetic surgery of the vulva, and other terms have been used. I suggest "vulvovaginal esthetic surgery" as an easily stated and descriptive terminology.

It is accepted that, as in other surgical disciplines, various techniques and instrumentation are used in performing these procedures.<sup>10-14</sup> It is not the purpose of this article to comment on the superiority of one method or technique over another. Surgeons, the marketplace, and, ideally, evidence-based outcome data will determine which procedures will survive the test of time.

Female cosmetic genital surgery (genital plastic surgery or vulvovaginal esthetic surgery) involves surgery on the female external genitalia, vagina, and surrounding structures and is designed to improve appearance subjectively, potentially provide psychological and functional improvement, or both, in sexual stimulation and satisfaction.

### LABIAPLASTY

Labiaplasty refers to surgical alteration, usually through reduction of the size of the labia. Although

this usually involves reduction of the labia minora or majora, occasionally labiaplasty involves reconstruction after obstetrical injury or enlargement via injection of bulking agents or autologous transfer. The procedure usually is performed by modified wedge resection, linear removal, and "sculpting," or by a modified z-plasty technique.

### REDUCTION OF THE CLITORAL HOOD ("CLITORAL UNHOODING")

Reduction of the clitoral hood is a surgical separation of the female clitoral prepuce designed to produce more "exposure" of the clitoral body, theoretically providing improved sexual stimulation, cosmetic size reduction of redundant prepuce or frenular folds, or both, for cosmetic reasons.

### VAGINAL REJUVENATION

Vaginal rejuvenation is a proprietary term meant to encompass perineoplasty and/or vaginoplasty as a technique to "tighten" the vaginal barrel and elevate and strengthen the perineal body. Unfortunately, neither patients nor medical professionals know exactly what is meant by this term. I suggest the use of more standard medical terminology to specifically describe the surgery performed.

### PERINEOPLASTY

Perineoplasty involves surgical reconstruction of the vaginal introitus. This sometimes is performed along with a minor low-posterior compartment repair with dissection and reapproximation in the midline of the levator ani musculature, whereby a diamond-shaped wedge of tissue is removed with the incisional apex in the posterior lower one third of the vagina and the incisional nadir on the perineum superior to the anus. The "wings" of the diamond extend laterally to the hymeneal ring. Skin, mucosa, and fibrotic scar tissue are excised, and the resultant defect is repaired vertically, reapproximating the levator muscles and resulting in an elevated perineum, attenuated vaginal orifice, strengthened perineal body, and altered visual appearance and, potentially, sexual function.

### VAGINOPLASTY

In vaginoplasty, portions of mucosa are excised from the vaginal fornices via scalpel, needle electrode, or laser. Unfortunately, there presently exists no standardization of the procedures performed, and they may consist of anterior colporrhaphy, high-posterior colporrhaphy, excision of lateral

vaginal mucosa, or a combination of the above, all designed to surgically "tighten" the upper vagina.

### HYMENOPLASTY

Hymenoplasty is a surgical procedure whereby the hymeneal ring is surgically altered via small, tightening revisions to produce size minimization of the vaginal aperture.

A valid nomenclature very well may include subgroups as suggested by Miklos and Moore<sup>16</sup> based on cosmetic, functional, or sexual reasons for surgery (or combinations of these).

Establishing a descriptive, officially recognized, standardized nomenclature will suppress the validity of marketing terms that, in some eyes, discredit the legitimacy of patients' requests for reasonable cosmetic-enhancement procedures.

### SUMMARY

Patients must be adequately screened, taking note of the ethical principles of autonomy, nonmaleficence, beneficence, justice, and veracity. Patients should be adequately protected and guided to develop reasonable expectations and understand that their genitalia are not abnormal. Surgeons should be adequately trained and experienced and should use universally accepted, accurate, and descriptive terminology. The procedures should be adequately described to patients, and risks and expected outcomes should be fully explained.

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