SPECIAL TOPIC

Why Women Request Labiaplasty

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Background: In recent years, labiaplasty has jumped in popularity, despite opposition to the procedure. In 2007, the American College of Obstetricians and Gynecologists declared the recommendation of cosmetic vaginal procedures to be "untenable," although in 2016 they allowed consideration of labiaplasty in adolescents if symptoms persist. The reasons for labiaplasty requests are not yet fully understood, and physician opposition limits patient access to surgical relief. **Methods:** In this prospective study, 50 consecutive patients consulting about labiaplasty were given a questionnaire assessing 11 physical and appearance-related symptoms associated with elongated labia.

Results: The mean patient age was 33.5 years (range, 17 to 51 years). Fifty-eight percent of women had given birth, 52 percent noticed that their labia had become elongated as they got older, and 93 percent had bilateral elongation. When asked about physical symptoms, over half of patients experienced tugging during intercourse, found tight pants uncomfortable, experienced twisting of the labia, and noted labia visibility in yoga pants. Nearly half experienced pain during intercourse, and 40 percent said their labia could become exposed in bathing suits. Regarding appearance, almost all patients were self-conscious and over half felt less attractive to their partner, experienced restricted clothing choice, and noted a negative impact on self-esteem and intimacy. Nearly all patients experienced at least four symptoms.

Conclusions: Most patients requesting labiaplasty experience both physical and appearance-related symptoms. Understanding this patient perspective is crucial in assessing surgical outcomes. Furthermore, the better all physicians understand labia symptomatology, the better supported patients will be in seeking surgical relief. (*Plast. Reconstr. Surg.* 139: 856, 2017.)

hywomen seek labiaplasty has been steeped in controversy in recent years. Although several studies have established that patients with functional and appearance-related symptoms associated with long labia minora experience high levels of satisfaction after labiaplasty¹⁻⁸ with low complication rates, ^{3,6,7,9,10} many physicians have historically opposed the procedure.¹¹⁻¹⁶ In one study in which over half of 33 women (57 percent) seeking labiaplasty complained of pain and discomfort from their elongated labia, the authors expressed surprise that both the patients and their

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referring doctors felt surgery was indicated, citing a lack of evidence regarding the safety and efficacy of the procedure.¹⁴

Physicians' reluctance to accept labiaplasty as a beneficial procedure is based on several factors. Many doctors claim that women with normal anatomy are unduly influenced by Brazilian waxing, online images, pornography, and promotion of designer vaginas to socially vulnerable women.^{11,13,14,17-23} In fact, Sharp et al. assert that surgery performed on

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normal anatomy such as labiaplasty and breast augmentation is a matter of ethics, politics, and philosophy, rather than being a matter of science.²⁴

The influence of media images on women's interest in labiaplasty has been the subject of several studies. Sharp et al. found that, compared with women who had not undergone labiaplasty, women who had undergone the procedure had seen more images of the female genitalia in the media and had internalized their idealized form.²⁵ Placik and Arkins associated an increase in labiaplasty with a shift in Playboy magazine's focus from the breasts to the female genitalia over time.¹⁷ Although several authors have stated that pornography influences women to have labiaplasty,^{13,18,22,23,26,27} there is little evidence to confirm that it has a major impact. In a study of 33 women presenting for labiaplasty, Crouch et al. found that only 12 percent reported even viewing pornography, much less being influenced by it.¹⁴ Rather than agreeing that women are manipulated by the media, Hunter proposed that women who are unhappy with the appearance of their genitalia may turn to the Internet to find out how to address their concerns, because it is the most accessible source of information.²⁸

Although some authors have found that patients seek labiaplasty for functional concerns,^{29,30} others suggest that patients mention physical complaints to "legitimize" a request for surgery.^{29,31} Nonsurgical approaches recommended to appease these women include education about their normal anatomy, suggesting a different bike seat, promoting looser underwear, advising the use of emollients for physical symptoms, and referring patients for psychological counseling.^{11,13,25,32,33}

Echoing these sentiments, in 2007, the Committee on Gynecological Practice under the American College of Obstetricians and Gynecologists published a formal position paper, which found the recommendation of vaginal rejuvenation and cosmetic vaginal procedures to be "untenable" in the absence of data on the safety and efficacy of the procedures.¹⁵ Furthermore, they expressed ethical concerns about the marketing and franchising models associated with the procedure, charging that claims that such surgery is proven and accepted are deceptive. Instead, citing the procedure's risks, including infection, scarring, dyspareunia, and altered sensation, they emphasized the importance of reassuring women of the wide variability in female genital appearance.¹⁵

Indeed, the complications reported in the literature include those mentioned by the American College of Obstetricians and Gynecologists, along with hematoma, overresection, scalloped edges, scarring, dehiscence, bleeding, aesthetic concerns, shortened introitus, and discomfort,^{3,6-10,18,34-37} with revision rates of nearly 3 percent.^{3,7} Nonetheless, the documented complication rates are low (2.65 to 10 percent),^{3,6,10,35-37} and the satisfaction rates are high (\geq 90 percent).¹⁻⁸ Specific benefits of the procedure include greater self-esteem; better sexual satisfaction; and improvement of discomfort associated with irritation, exercise, and sexual intercourse.^{3,6,7,9,29} Indicating that the American College of Obstetricians and Gynecologists is shifting its attitude, a formal opinion published in 2016 by the Committee on Adolescent Health Care allowed for the consideration of labiaplasty with the persistence of symptoms or emotional discomfort.³⁸

Physicians' own personal biases can influence their viewpoint on labiaplasty. Despite the procedure's reported favorable outcomes,^{1-3,39} some physicians find female genital cosmetic surgery and female genital mutilation to be barely indistinguishable. One of the earliest articles on labiaplasty described the degrees of female circumcision, including excision of the entire genitalia with infundibulation, and conjectured that patients may feel more feminine after a "partial circumcision."⁴⁰ Labiaplasty opponents argue that both labiaplasty and female genital mutilation are unethical, medically unnecessary procedures that exploit female patients who are insecure about their bodies and fall victim to a culture that portrays women as sex objects.^{1-3,10,12-14,39,40} The solution they offer is patient education about the diversity of female genital appearance to correct the media-derived perception that the adolescent-like vulva is normal.¹⁶

Even among those who accept labiaplasty as a beneficial procedure, there is disagreement about the indications. Although a patient's complaints may be accepted by some physicians as legitimate justification for the procedure,⁹ others adhere strictly to labia measurements to determine surgical candidacy, regardless of symptomatology.^{14,41} Qualifying lengths vary by the classification used. Felicio defined different degrees of labia hypertrophy, from type I (<2 cm) to type IV (>6 cm),⁴² whereas others have defined hypertrophy as a length greater than 4 cm¹ or 5 cm.⁴³ Women seeking labiaplasty often have labia lengths that fall within "the normal range," and on that basis surgery is denied.^{14,41}

Fueling the labiaplasty debate, particularly where the procedure is covered by national health services, is the perception that the fee-for-service payment system under which labiaplasty is often performed tempts surgeons into convincing women to have an unnecessary procedure.¹⁶ Despite the maelstrom, between 2011 and 2015, the number of labiaplasties performed in the United States by surgeons across different specialties has jumped over 400 percent, from 2141 to 8745⁴⁴ (Fig. 1). Although previous studies have investigated women's motivations for seeking labiaplasty, their numbers are few and their results varied. Sharp et al. and Sarwer found patient concerns to be primarily functional,^{29,30} whereas others have found them to be primarily aesthetic.^{13,14,18,25,28,34,36,45} Still others have found that most patients have both functional and aesthetic complaints.^{1,4,6,23,26,35,46,47} The purpose of this study was to better understand the motivation behind why women seek labiaplasty.

PATIENTS AND METHODS

To investigate possible physical and appearance-related concerns that might motivate women to seek labiaplasty, a questionnaire was given prospectively to 50 consecutive patients at the time of their labiaplasty consultation between January of 2014 and April of 2016. Questions were developed



Fig. 1. This 39-year-old woman demonstrates a typical appearance of the labia minora protruding below the labia majora, before labiaplasty (*above*) and 8 months after labiaplasty (*below*). The patient gave written consent for the publication of her photographs.

from in-depth qualitative interviews with patients and expert opinion and an extensive literature review. This pool of questions was then pretested on a sample of patients to elucidate ambiguities, ascertain appropriateness, and verify acceptability and questionnaire completion time. Institutional review board approval was not sought, as this was a nonexperimental pilot survey study. Written informed consent was obtained by the senior surgeons (H.J.F. and F.L.C.) from those choosing to participate, and patients filled out the surveys privately in an examination room. Patient demographics and survey answers were documented in a study patient log and stored in a passwordprotected computer. Questions were then sorted according to categories pertaining to physical and appearance-related concerns, age, laterality, childbirth history, and duration. Data are presented as frequency and means, with standard deviations.

RESULTS

Fifty women consulting about labiaplasty were included in this study. The mean age \pm SD was 33.5 \pm 9.4 years, with a range of 17 to 51 years. Fifty-eight percent of the women had given birth and 42 percent were nulliparous. Nearly all (94 percent) had bilateral labia elongation (Table 1).

With instructions to check all applicable choices, 52 percent of patients said they first noticed that their labia were elongated as they

Table 1. Labiaplasty Survey Results

Patient Characteristics	Value (%)
Mean age ± SD, yr	33.5 ± 9.4
Previous child-bearing	
Yes	29 (58)
No	21 (42)
Physical symptoms	
Tugging during intercourse	37 (74)
Uncomfortable wearing tight clothing	36 (72)
Uncomfortable twisting of labia	29 (58)
Visible labia in exercise clothing	27 (54)
Pain during intercourse	24(48)
Exposure in bathing suit	20(40)
Psychological symptoms	
Self-consciousness over appearance	47 (94)
Negative self-esteem	33 (66)
Less attractive to partner	32(64)
Restrictive of clothing choice	28 (56)
Negative impact on intimacy	32(64)
Timing of symptoms	
Increasing age	26(52)
After childbirth	16(32)
At puberty	11(22)
After weight gain	1(2)
As long as can remember	9 (18)
Laterality	
Unilateral	3 (6)
Bilateral	47 (94)

got older, 32 percent after childbirth, 22 percent at puberty, 18 percent for as long as they could remember, and 2 percent after weight gain. Of the six physical symptoms listed, on average, patients experienced 3.46 ± 1.68 (Fig. 2). Three-quarters of patients (74 percent) experienced tugging of the labia during sexual intercourse, 72 percent found tight pants uncomfortable to wear, 58 percent experienced uncomfortable twisting of the labia, 54 percent noted their labia were visible in exercise clothing, 48 percent experienced pain or discomfort from their labia during sexual intercourse, and 40 percent said that their labia could become exposed when they wore a bathing suit. Only two of the 50 patients (4 percent) had no physical complaints.

Of the five appearance-related symptoms listed, on average, patients experienced $3.44 \pm$ 1.30 (Fig. 3). Nearly all (94 percent) felt self-conscious about the appearance; 66 percent experienced a negative impact on their self-esteem; 64 percent felt less attractive to their partner; 56 percent said their labia restricted their choice of underwear, bathing suits, or clothing; and 64 percent felt their labia had a negative impact on intimacy. All 50 patients (100 percent) had at least one complaint about the appearance of their labia. Of the 11 total complaints listed,

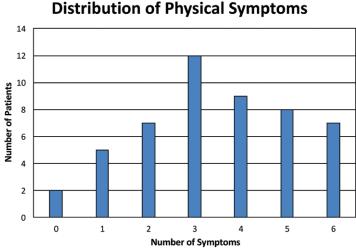
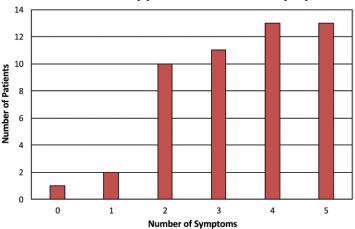


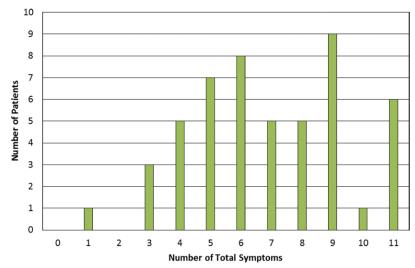
Fig. 2. Frequency distribution of physical complaints among 50 patients

consulting about labiaplasty. Average ± SD of 3.46 ± 1.68 physical symptoms of six listed per patient.

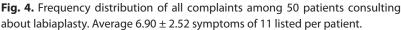


Distribution of Appearance-Related Symptoms

Fig. 3. Frequency distribution of appearance-related complaints among 50 patients consulting about labiaplasty. Average 3.44 ± 1.30 appearance-related symptoms of five listed per patient.



Distribution of Total Symptoms



patients experienced, on average, 6.90 ± 2.52 (Fig. 4).

DISCUSSION

The cause of long labia has been attributed to a plethora of factors, including chronic irritation, hereditary factors, puberty, exogenous androgenic hormones, aging, childbirth, lymphedema, urinary incontinence, myelodysplastic disease, sensitivity to topical estrogen, and possible multifactorial contributions.^{3,4,31,40,48,49} Others attribute the cause of labia hypertrophy to excessive masturbation, excessive manipulation, and early intercourse,^{2,23,48,49} without defining either "excessive" or "early."

As manifold as the cause of elongated labia is the array of interpretations of what drives women to request labiaplasty. Although several studies document physical and appearance-related symptoms as motivation,^{1,4,6,26,29,31,35,46,47} opponents link the procedure to female genital mutilation^{12–14} and manipulation by media images of the adolescent vulva.^{11,13,14,17–23}

Given the high satisfaction rate (≥ 90 percent)¹⁻⁸ among labiaplasty patients, those who maintain that women complaining about their labia have been manipulated by the media may themselves be the victims of cultural biases. In 2012, Triana and Robledo stated that female genital plastic surgery faces opposition in a society that, despite its recent advances, still fails to accept women's equality in fully expressing their sexuality.⁵⁰ Their view is borne out by the claim that a surgeon's openness to performing labiaplasty arises from male chauvinism and gender inequality rather than from medical indications,⁵¹ despite the documented benefits.^{3,6,7,9,29}

Physicians may be unaware of their own biases, which may impact their openness to either performing labiaplasty or to referring a patient elsewhere for the procedure.¹⁰ Reitsma et al. found that plastic surgeons were more likely than gynecologists to consider the procedure for interested patients, and male physicians, independent of specialty, were more open to labiaplasty than were their female counterparts.²²

Patient access to the procedure may be further restricted by physicians who believe that normal anatomy cannot result in physical distress. Labia symptoms, they assume, are the result of psychological issues, despite the general acceptance of other procedures that alter normal anatomy, such as face lift, breast augmentation, and abdominoplasty. Moran and Lee, for example, recommend that women requesting labiaplasty be referred for counseling to help them accept their genital appearance.⁵²

Physicians' personal biases may possibly increase the likelihood of diagnosing women seeking labiaplasty with body dysmorphic disorder. According to the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition,* those suffering from body dysmorphic disorder are preoccupied, distressed, and impaired in carrying out their daily activities by what they perceive to be a physical flaw that is not apparent or barely so to others.⁵³

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Consequently, women presenting with complaints of distress over labia with measurements that fall within the 4-cm mark may be at greater risk for being diagnosed with body dysmorphic disorder. In fact, two studies showed that 18 percent of patients with "normal range" labia length seeking labiaplasty were diagnosed with body dysmorphic disorder,^{20,54} yet one of the studies found an overwhelming 88 percent of those women "lost the diagnosis" by 3 months after surgery.²⁰

Understanding why a woman seeks labiaplasty is particularly important given the discord between patients' and many physicians' perceptions.⁸ Although several articles have reported physical and appearance-related symptoms that motivate women to seek labiaplasty,^{4,8-11,18,30,33,35,46,47} few have measured their incidence.^{1,55} Patient-reported outcome measures use surveys to compare patient perceptions preoperatively with their perceptions postoperatively to assess the impact that a procedure has on a patient's quality of life. The first step in designing such an outcomes survey is to determine the factors that are most relevant to patients.⁵⁶ This study attempts to provide data toward that goal.

The results of this study indicate that elongated labia are associated with both physical and appearance-related symptoms. Nearly all patients (96 percent) had at least one physical symptom, and 72 percent experienced three or more. Bramwell et al. and Sharp et al. surmised that patients mentioned physical complaints to legitimize their request for labiaplasty.^{29,31} This conjecture may imply false claims of physical symptoms made to assuage patient guilt over having cosmetic concerns. However, several authors report patient labia concerns to be primarily aesthetic, with little mention of physical complaints.13,14,18,25,28,34,36,45 Furthermore, given the 15 percent rise in cosmetic surgical procedures in the past 5 years,⁴¹ with the two most popular procedures not typically justified by physical complaints (liposuction and breast augmentation),⁴¹ the guilt-inducing stigma of having cosmetic surgery is likely less pervasive now than it was in years past. Alternatively, the authors may have conjectured that physical complaints were mentioned to justify surgery for insurance coverage, with the implication that the true incidence of physical complaints would be less than reported. In this study, in which none of the cases was insurance-based, the absence of any possible financial gain from claims of physical symptoms lends credence to the legitimacy of the patients' complaints. Regarding appearancerelated concerns, nearly all (94 percent) were selfconscious, and 74 percent of patients had three or more symptoms. All 50 experienced at least one complaint of the 11 listed, and 92 percent experienced four or more, indicating that long labia can negatively impact women's lives (Fig. 4).

The age at which patients first noticed their labia were elongated was variable, with 18 percent noticing the length for as long as they could remember. Twenty-two percent noticed elongation at the onset at puberty and 32 percent after childbirth, indicating that hormones and the physical pressure of pregnancy and delivery may result in labia lengthening in some women. Among all patients who had undergone childbirth, however, 45 percent experienced no association between their long labia and pregnancy. Patients most commonly noticed labia lengthening with age, indicating a possible association with hormonal changes, effects of pregnancy, loss of tissue elasticity, and prolonged exposure to gravity. The broad range in the ages of our patients (17 to 51 years) and the variable age of onset of labia elongation indicate that the cause is likely multifactorial.

Although some consider age younger than 18 years to be a contraindication to labiaplasty,^{14,33} two patients in this study were aged 17 years. Their mothers, who accompanied them for the consultation, both attested to the frequent physical pain that their daughters mentioned. One of those patients reported that a woman gynecologist with whom she had consulted had "shamed" her, telling the patient that her labia were not long enough to cause symptoms. Of note, both patients had complete relief of their symptoms after surgery.

The limitations of this study include the small sample size, the limited number of questions, and the lack of a control group of women not interested in labiaplasty. Questions were primarily based on the 11 most frequent symptoms mentioned by previous patients and did not include a more comprehensive list, nor did it contain questions from a validated survey. Response choices were limited to yes or no; a Likert scale would have allowed a more complete picture of how severely patients perceived their symptoms to be. Furthermore, the scope of this study was restricted to symptoms experienced preoperatively and did not measure surgical outcomes. That is the topic of a future study.

In addition, the symptoms were divided into physical and appearance-related categories, a distinction that was somewhat arbitrary. For example, patients explained in conversation that they noted exposure of their labia through the physical discomfort of pinching or chafing; they would have been unable to easily see their own labia in the absence of a mirror at the beach or swimming pool. Although labia exposure was detected through physical discomfort, the knowledge that their labia were exposed would likely result in an appearance-related symptom. Similarly, labia visibility in tight exercise pants was considered to be a physical finding, revealed by fabric wedged between and separating the two labia. However, the awareness of labia visibility would be an appearance-related complaint. To distinguish patients whose labia twist in tight pants, causing discomfort, from those uncomfortable in pants without labia twisting, the authors listed two different symptoms. The two entries may appear to be redundant, however, as the distinction is subtle.

Despite these limitations, this study establishes the frequency with which patients seeking labiaplasty experience specific physical and appearance-related symptoms that impact the quality of their lives, which few studies to date do. The pervasiveness of these symptoms established by this study puts into question the degree to which women seeking labiaplasty are victims of the media, avaricious doctors, and a culture that objectifies women as sex objects. Instead, the findings indicate that long labia can have a negative impact on a woman's quality of life. Although opponents of labiaplasty urge doctors to do no harm and to treat labia symptoms with therapy and emollients, the greater harm may come from denying a surgical option to symptomatic women. In fact, antilabiaplasty views may be softening. After its firm 2007 stance against cosmetic vaginal procedures, including labiaplasty, in 2016 the American College of Obstetricians and Gynecologists published another opinion put forth by the Committee on Adolescent Health Care, stating that labiaplasty can be considered an option in adolescents in the presence of persistent physical and emotional symptoms.³⁸

CONCLUSIONS

Women seeking labiaplasty suffer from physical and appearance-related symptoms that affect the quality of their lives. Few previous studies have measured the frequency with which women experience specific symptoms. In this study, nearly all 50 women who consulted about labiaplasty experienced four or more symptoms. This patient perspective is crucial in understanding why women request labiaplasty, and it will ultimately serve as a valuable tool in assessing postprocedure outcomes. The more physicians understand the symptomatology associated with elongated labia, the better supported patients will feel as they search for surgical relief.

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