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RS Global Sp. z O.O.
ISNI: 0000 0004 8495 2390

Dolna 17, Warsaw,
Poland 00-773
+48 226 0 227 03
editorial_office@rsglobal.pl

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AESTHETIC MEDICINE IN GYNECOLOGY: REVIEW OF SELECTED METHODS

Patrycja Misiaszek (Corresponding Author, Email: patryciamisiaszek99@gmail.com)

Specialist Hospital named after E. Szczeklik in Tarnów, Independent Public Health Care Facility, Szpitalna 13, 33-100 Tarnów, Poland

ORCID ID: 0009-0002-3962-1034

Szymon Rydzewski

Specialist Hospital named after E. Szczeklik in Tarnów, Independent Public Health Care Facility, Szpitalna 13, 33-100 Tarnów, Poland

ORCID ID: 0000-0002-0261-0115

Sylvia Boczek

Upper Silesian Medical Center of Prof. Leszek Giec of the Silesian Medical University, Ziołowa 45–47, 40-635 Katowice–Ochojec, Poland

ORCID ID: 0009-0001-1947-4594

Mikołaj Herba

Upper Silesian Medical Center of Prof. Leszek Giec of the Silesian Medical University, Ziołowa 45–47, 40-635 Katowice–Ochojec, Poland

ORCID ID: 0000-0002-8292-261X

Patrycja Kinga Marta

Fryderyk Chopin University Clinical Hospital in Rzeszów, Fryderyk Chopin Street 2, 35-055 Rzeszów, Poland

ORCID ID: 0009-0009-6972-8140

ABSTRACT

Background: Aesthetic gynecology is a rapidly evolving branch of medicine that integrates aesthetic, functional, and psychosexual aspects of women's intimate health. Procedures within this field aim not only to improve the appearance of the external genitalia but also to address symptoms of genitourinary syndrome of menopause (GSM), urinary incontinence, sexual dysfunction, and postpartum or oncological changes.

Aim: The aim of this study was to provide a comprehensive review of selected aesthetic procedures used in gynecology, with a focus on their indications, mechanisms of action, efficacy, and safety, as well as the psychological and ethical aspects surrounding their use.

Materials and Methods: This work was based on a narrative literature review. Sources included peer-reviewed medical journals, systematic reviews, meta-analyses, and current clinical guidelines from both Polish and international databases. The selection criteria prioritized recency, clinical relevance, and scientific credibility.

Results: The review revealed a wide range of procedures available in aesthetic gynecology, including injectable treatments, energy-based therapies, surgical techniques, and supportive care. Most procedures were found to be safe and well tolerated, with high levels of patient satisfaction. They demonstrated benefits in improving both physical symptoms and psychosocial well-being, particularly in postmenopausal and postpartum women. However, limitations include the lack of standardized protocols and long-term outcome data for some methods.

Conclusions: Aesthetic gynecology holds significant therapeutic and psychological value, especially when applied within a multidisciplinary, individualized care model. Ethical practice requires proper patient qualification, informed consent, and education regarding both risks and realistic expectations. Further research and professional training are essential to ensure safe, evidence-based implementation of these procedures.

KEYWORDS

Aesthetic Gynecology, Genitourinary Syndrome of Menopause, Labiaplasty, Vaginal Rejuvenation, Hyaluronic Acid, Platelet-Rich Plasma, Radiofrequency, Botulinum Toxin, Women's Health

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1. Introduction

Aesthetic medicine in gynecology is a rapidly growing field that merges the desire to enhance intimate quality of life with advances in medical technology. Modern procedures go beyond purely cosmetic goals, offering real therapeutic support for symptoms of genitourinary syndrome of menopause (GSM), urinary incontinence, vaginal dryness, postpartum scarring, or dyspareunia. The field is also relevant from a psychosexual perspective—treatments can improve self-esteem, emotional well-being, and sexual satisfaction. With increasing patient awareness and expectations surrounding intimate health, aesthetic gynecology is becoming a more prominent part of clinical practice.

This work is based on a review of up-to-date scientific literature and clinical reports from both Polish and international sources. It includes articles published in peer-reviewed medical journals, reports from scientific societies, and data from current clinical guidelines and recommendations. Systematic reviews, literature reviews, and meta-analyses were also analyzed. The selection of materials was guided by their recency, scientific merit, and practical relevance to aesthetic gynecology. The review considered not only clinical efficacy and safety of procedures, but also their impact on patients' quality of life and the ethical-legal context of their use.

The aim of this paper is to provide an overview of current aesthetic medicine techniques applied in gynecology, with particular attention to their use in both functional and aesthetic contexts. The paper presents a classification and description of available procedures, discusses their effectiveness, safety, and potential indications and contraindications. It also highlights the psychological and social factors influencing women's decisions to undergo aesthetic gynecological treatments. The scope of the review includes both non-invasive and surgical procedures, as well as adjunctive therapies and modern technologies based on energy use.

2. Fundamentals of the Anatomy and Physiology of the Intimate Area**2.1. Anatomical Structure of the Female External Genitalia**

The external genitalia of a woman (vulva) include: the labia majora, labia minora, clitoris, vaginal vestibule, urethral opening, and the greater vestibular glands (Bartholin's glands). The labia majora, covered with pubic hair, contain adipose tissue and serve a protective function.

The labia minora are thinner, hairless, and highly variable in shape, color, and length across individuals¹. The clitoris is richly innervated and consists of the glans, body, and crura².

The vaginal vestibule includes the openings of the vagina and urethra, as well as the ducts of the greater vestibular glands. All these structures play a vital role in both protective and sexual functions³.

2.2. Age-, Birth-, Menopause- and Disease-Related Changes

With age and hormonal changes in the female body, structural and functional changes occur in the genital area. Especially important are alterations caused by declining estrogen levels during menopause, leading to urogenital atrophy, or what is referred to as genitourinary syndrome of menopause (GSM)^{4,5}. This period is marked by thinning of the vulvar and vaginal epithelium, reduced tissue elasticity and vascularity, and loss of natural lubrication. These changes contribute to vaginal dryness, increased susceptibility to micro-injuries, and a higher risk of infections and inflammation. Symptoms often negatively affect sexual health, lowering libido and causing discomfort or pain during intercourse (dyspareunia), which can lead to avoidance of sexual activity and strain on relationships^{4,5}.

In addition, anatomical and functional changes in the genital area may result from vaginal delivery. Childbirth may damage the pelvic floor muscles and fascia, cause perineal tearing or episiotomy, and deform

the vaginal opening. Common consequences include stretched or asymmetric labia, which may impact not only aesthetics but also everyday comfort. Some women also experience urinary incontinence, reduced vaginal sensation, a feeling of "looseness," and diminished sexual function⁶. These factors represent valid indications for considering aesthetic and reconstructive gynecological interventions, which can improve both quality of life and sexual health.

Progressive atrophic changes in the vulvovaginal tissues can also be accelerated by chronic illnesses. Conditions such as diabetes, autoimmune diseases, and some cancers may impair vascularization and weaken tissue structure. Particularly significant are the effects of oncological treatments—both radiotherapy and chemotherapy can irreversibly damage the vaginal and vulvar mucosa, leading to persistent dryness, pain, and loss of elasticity and epithelial function⁷.

2.3. Psychosexual Aspects Related to the Appearance of the Intimate Area

Perception of the appearance of one's genitalia can significantly affect mental health, self-esteem, and sexual satisfaction. An increasing number of women report concerns related to labial asymmetry, hypertrophy, or pigmentation. Studies have demonstrated a correlation between dissatisfaction with genital appearance and low self-esteem, feelings of shame, sexual dysfunction, and reduced sexual activity^{8,9}.

The growing influence of digital media and widespread access to pornographic content have helped shape unrealistic ideals about the "perfect" genital appearance. This cultural pressure has resulted in a growing number of women seeking aesthetic and functional procedures—such as labiaplasty or vaginoplasty—even when there are no medical indications^{9,10}.

Aesthetic gynecological procedures can improve sexual satisfaction and psychological well-being, but they require prior assessment and proper qualification of the patient¹⁰.

3. Indications for Aesthetic-Gynecological Procedures

3.1. Medical Indications (Atrophy, Dryness, Urinary Incontinence)

Impaired physical function of the intimate area, such as dryness, thinning of the mucosa, or dyspareunia, is common during menopause as part of the genitourinary syndrome of menopause (GSM). GSM symptoms include itching, irritation, and reduced lubrication, all of which significantly lower sexual quality of life and intimate comfort^{11,12}.

Risk factors for urinary incontinence include vaginal delivery, episiotomy (perineal incision or tear), multiparity, and a prolonged second stage of labor¹³. Within the first year after childbirth, 26–56% of women experience urinary incontinence, most often of the stress type (SUI), due to pelvic floor muscle and ligament injury^{13,14}.

While many cases resolve within a few months, approximately 30% of SUI symptoms may persist longer, requiring proper diagnostic evaluation and clinical intervention^{13,14}.

3.2. Aesthetic and Psychological Indications

Dissatisfaction with the appearance of the external genitalia can lead to reduced self-esteem, psychological distress, and diminished sexual well-being. It is estimated that around 37% of women express discontent with the appearance of their vulva, which correlates with heightened body-related anxiety and lower sexual satisfaction¹⁵. Poor genital self-image often results in embarrassment during intimacy, potentially causing sexual avoidance or emotional discomfort^{15,16}.

Low acceptance of one's genital appearance is also linked to higher rates of sexual dysfunction, including decreased desire, difficulty achieving orgasm, and a perceived lack of sexual attractiveness in partner relationships¹⁶. Research shows that women unhappy with the appearance of their intimate areas report more sexual limitations and greater anxiety in contexts involving physical closeness^{15,16}.

Psychological motivations for aesthetic-gynecological procedures may stem from body image disturbance, reduced sense of femininity, social pressure, or individual aesthetic expectations. Systematic reviews indicate that women's motivations are multifactorial and include not only aesthetic and functional needs but also emotional ones, such as a desire to improve intimate relationships, reduce complexes, or regain bodily autonomy¹⁷.

Thus, the decision to undergo a procedure should always be preceded by a thorough analysis of the patient's motivations, to avoid interventions driven by unrealistic expectations or body image disorders.

3.3. The Role of Consultation and Patient Qualification

The consultation and qualification process should consider not only physiological but also psychological and educational aspects. A comprehensive medical and psychosexual history should be taken first, evaluating GSM symptoms, urinary incontinence, levels of discomfort, and actual complaints^{11, 13}. A physical gynecological exam helps assess anatomy, the degree of atrophy, and any deviations from the norm¹³.

The next step involves evaluating the patient's motivations—checking whether their expectations are realistic and whether their aesthetic goals align with achievable outcomes¹⁷. Educational aspects are also important—explaining the natural variability of genital anatomy and outlining all available treatment pathways. A well-established diagnosis and patient psychoeducation can prevent inappropriate decisions.

Obtaining informed consent and discussing possible support options—including a multidisciplinary approach involving a gynecologist, sexologist, and psychologist—are essential elements of responsible care¹⁷.

4. Review of Methods and Procedures in Aesthetic Gynecology

4.1. Injectable Treatments

4.1.1. Hyaluronic Acid – Rejuvenation, Volumization, Labia Majora Augmentation

Hyaluronic acid is a naturally occurring substance in the skin and mucous membranes, playing a key role in maintaining tissue hydration and elasticity. Injecting it into the labia majora restores volume and firmness, improving the aesthetic appearance of the external genitalia¹⁸.

This procedure is particularly useful for women experiencing signs of aging, reduced subcutaneous fat density, or postpartum changes resulting in volume loss and tissue laxity in the intimate area¹². Hyaluronic acid fillers can also improve comfort during physical activity and reduce friction or irritation caused by diminished soft tissue volume¹⁹.

In addition to its volumizing effect, hyaluronic acid is also used to improve the quality of vaginal mucosa—especially in women with symptoms of vaginal atrophy due to aging or declining estrogen levels²⁰. Mucosal thinning, dryness, and reduced elasticity negatively affect both daily comfort and sexual function, leading to complaints such as dryness, burning, and dyspareunia²¹. Injections into the vaginal wall help enhance mucosal trophism, hydration, and regenerative capacity²⁰. Symptom improvement has been observed in postmenopausal patients, postpartum women, and those after gynecological surgeries—especially when topical estrogen therapy is contraindicated²¹.

The mechanism of action involves water binding and fibroblast stimulation to produce collagen, improving tissue density and elasticity¹⁸. Results are often visible within weeks, though maintenance requires repeated injections, as the substance is gradually metabolized¹². The procedure is usually well tolerated, with mild, transient side effects such as redness, swelling, or tenderness at the injection site¹⁹. Enzymatic reversal of the filler is possible if needed, enhancing treatment safety¹². As a biocompatible material, hyaluronic acid rarely triggers immune responses or complications, making it a valuable tool for improving both comfort and quality of life—functionally and aesthetically^{18, 21}.

4.1.2. Platelet-Rich Plasma (PRP) – Tissue Regeneration, G-Shot

The application of platelet-rich plasma (PRP) in aesthetic gynecology is based on its regenerative properties. PRP is rich in platelets that contain growth factors and cytokines, which activate repair processes in tissues²². Injecting PRP stimulates angiogenesis, enhances blood flow, and improves microcirculation in the vaginal and vulvar mucosa²³. This renewal of the vaginal epithelium increases its elasticity, hydration, and structure—especially beneficial for women suffering from GSM symptoms^{22, 24}. Enhanced mucosal hydration and collagen restoration improve both sexual and daily comfort, especially in women reporting dryness, burning, or pain during intercourse²⁴.

PRP preparation involves collecting autologous blood and centrifuging it to concentrate the platelets, which minimizes the risk of immune reactions or infections^{22, 25}. Because of its natural origin, the procedure is considered safe and well-tolerated, with side effects usually limited to mild swelling or redness at the injection site²⁵.

PRP is also used in the so-called G-shot procedure, aimed at enhancing sexual function by injecting PRP into the erogenous zone of the anterior vaginal wall²⁴. This may increase the sensitivity of local nerve endings and blood vessels, potentially improving subjective sexual satisfaction²⁴. However, the literature emphasizes that the effectiveness of this procedure remains unconfirmed in well-designed randomized studies²⁶.

4.1.3. Botulinum Toxin – Treatment of Vaginismus, Vulvodynia, Dyspareunia, Pelvic Pain Syndrome, and Overactive Bladder

Vaginismus

Vaginismus is a psychosexual disorder characterized by involuntary, painful contractions of the muscles surrounding the vaginal entrance (mainly pelvic floor muscles), making penetration—during intercourse, gynecological examination, or tampon insertion—difficult or impossible. The use of botulinum toxin in treating vaginismus involves blocking acetylcholine release at the neuromuscular junction, leading to muscle relaxation in the pelvic area²⁷. Injections are administered into the pubococcygeus muscle and vestibular area, reducing spasms and improving sexual comfort. This therapy provides significant relief, especially for patients resistant to conventional behavioral treatments¹⁴.

Vulvodynia

Vulvodynia is chronic idiopathic vulvar pain lasting for at least three months, not caused by infection, dermatological disease, or neurological disorder. It may involve only the vestibule (vestibulodynia) or the entire vulva. Despite being externally invisible, the condition can profoundly impair quality of life, particularly in areas of sexuality and partner relationships. Botulinum toxin injections into muscles surrounding the vaginal entrance and vulva block pain transmission and reduce muscle tension, alleviating hyperalgesia and improving patients' sexual quality of life. Therapeutic effects last several months and the procedure can be repeated²⁸.

Chronic Pelvic Pain Syndrome (CPPS)

Pelvic pain syndrome is a complex clinical condition involving persistent pain in the abdomen, perineum, or genital region. Often accompanied by pelvic floor muscle overactivity or tension, CPPS may be alleviated with botulinum toxin injected into identified trigger points. The toxin reduces muscle activity and mitigates pain²⁷. This approach is an alternative for patients unresponsive to other therapies. Effects typically last 3–6 months, with the option for repeat injections. Possible side effects include transient urinary issues or muscle weakness.

Overactive Bladder (OAB)

Overactive bladder is a syndrome involving lower urinary tract symptoms, including urgency, frequency, and nocturia, in the absence of infection or other identifiable causes. In OAB treatment, botulinum toxin is injected into the bladder wall to block nerve signals responsible for uncontrolled detrusor contractions. This results in reduced urgency, fewer incontinence episodes, and improved quality of life. The procedure is minimally invasive and well tolerated, though it requires periodic repetition, typically every 6–9 months²⁹.

Dyspareunia

Dyspareunia—pain during intercourse—commonly coexists with vulvodynia and vaginismus³⁰. Botulinum toxin treatment can reduce tissue hypersensitivity and muscle tension in the vestibular and perineal area. The mechanism involves both muscle relaxation and neuromodulation, reducing pain perception²⁸. This method is particularly valuable for cases unresponsive to pharmacological or psychosexual therapies.

4.1.4. Needle and Microneedle Mesotherapy of the Intimate Area

Needle mesotherapy in the intimate area involves the delivery of revitalizing substances into the deeper layers of the skin via microinjections. Agents such as hyaluronic acid, vitamins, or platelet-rich plasma (PRP) are used to improve skin texture, hydration, and tissue firmness. The microneedling process induces micro-injuries that stimulate natural collagen and elastin production³¹. This technique is often combined with radiofrequency, which significantly enhances skin remodeling and subcutaneous tissue restructuring.

Clinical reports indicate noticeable improvements in pigmentation, epidermal texture, and increased skin elasticity³². Possible side effects include transient pain or discomfort, redness, and swelling, which typically resolve within a few days. Recovery time is short—patients usually return to daily activities within 1–2 days. The procedure is generally well tolerated, with complications limited to mild skin reactions.

The availability of various techniques and the ability to combine them with other procedures makes mesotherapy an appealing option in clinical practice. However, its wider use is limited by the current lack of standardized injection protocols and randomized studies evaluating treatment parameters.

4.2. Energy-Based Procedures

Energy-based treatments are an essential component of modern aesthetic gynecology. Techniques such as laser therapy, radiofrequency (RF), and high-intensity focused ultrasound (HIFU) are used to manage vaginal atrophy symptoms, improve tissue quality, and perform rejuvenation and tightening procedures. These methods stimulate collagen production, remodel the extracellular matrix, and enhance the functional and aesthetic condition of the intimate area. They are minimally invasive, have short recovery times, and demonstrate high safety profiles^{33, 34}.

4.2.1. Fractional CO₂ and Er:YAG Lasers – Vaginal Tightening, Treatment of Atrophy, Pigmentation Disorders

These are among the most frequently employed technologies in aesthetic gynecology. They work by inducing controlled epithelial injury and stimulating the deeper layers of the vaginal wall to regenerate. Fractional laser energy creates microscopic coagulation zones that trigger tissue repair, resulting in increased collagen synthesis and improved vaginal elasticity^{34, 35}. This technology is used to treat GSM symptoms such as dryness, burning, discomfort, or dyspareunia. Improvements in vaginal tone, hydration, and reduced pigmentation in the vulvar region have also been observed^{35, 36}.

4.2.2. Radiofrequency (RF) – Vaginal Lifting and Rejuvenation

Radiofrequency (RF) is a technology that delivers heat to tissues using electromagnetic waves in the radiofrequency range. The thermal effect causes collagen fibers to contract and stimulates fibroblasts to synthesize new collagen, resulting in enhanced vaginal firmness and tension³⁷. RF treatments are also used to improve tissue hydration, increase elasticity, and achieve overall rejuvenation of the vagina and labia^{37, 38}. This technique is commonly applied in postmenopausal patients or postpartum women to address vaginal laxity or reduced sexual satisfaction³³. Radiofrequency procedures are generally painless and can be performed on an outpatient basis. Results are often visible after a few sessions, with minimal downtime and a low risk of complications.

4.2.3. High-Intensity Focused Ultrasound (HIFU) – Collagen Stimulation and Tissue Tightening

HIFU (High-Intensity Focused Ultrasound) technology uses concentrated ultrasound energy to selectively heat deep tissue layers. This leads to immediate collagen contraction and stimulates long-term tissue remodeling. HIFU treatments improve vaginal tone and promote regeneration, effectively addressing vaginal laxity—a condition often described by patients as reduced sexual satisfaction or a sensation of “looseness”³⁶.

Since HIFU does not damage the epithelial layer, it allows for rapid recovery and minimizes the risk of complications^{36, 38}. The procedure is well tolerated, and patients can usually return to normal activities on the same day. HIFU is considered a safe and effective option for improving postnatal and menopausal tissue changes.

Energy-based procedures offer safe and effective tools for improving women’s quality of life, particularly in the context of postpartum and menopausal changes. Their application is justified in both aesthetic and functional domains—including GSM, urinary incontinence, hyperpigmentation, and loss of firmness and elasticity in the intimate area³⁵. These therapies can also be part of a holistic approach to women’s sexual health, combining medical intervention with improved self-esteem and psychological comfort³⁴.

4.3. Invasive and Surgical Procedures

Invasive and surgical procedures in aesthetic gynecology involve anatomical and functional correction of the genital area, using surgical techniques and tissue reconstruction methods. The key methods include labiaplasty, clitoroplasty, lipofilling, and thread implantation.

4.3.1. Labiaplasty

Labiaplasty is the most commonly performed surgical procedure in genital aesthetics. It involves reducing the size of the labia minora or labia majora to restore anatomical proportions and physical comfort³⁹. The surgery can be performed using various techniques—such as edge resection, de-epithelialization, or wedge resection—allowing for tailored results based on the patient's anatomy⁴⁰.

Indications include both functional concerns (e.g., pain, chafing during movement or physical activity) and aesthetic ones (e.g., discomfort related to the appearance of the genitalia)^{39, 40}. The postoperative recovery period is associated with swelling, bruising, pain, and a risk of infection, which typically resolve within 2–4 weeks^{39, 41}.

Complications such as asymmetry, over- or under-resection of tissue, or scarring are rare. Most patients report high satisfaction with the aesthetic and functional outcomes^{39, 42}.

4.3.2. Clitoroplasty

Clitoroplasty is a surgical procedure that exposes the clitoral glans by modifying the clitoral hood. This may improve access to erogenous zones and increase sexual sensitivity. The surgery involves removing excess skin from the clitoral prepuce while preserving blood supply and nerve endings—a technically demanding task requiring precision⁴³.

This outpatient procedure is usually performed under sedation or general anesthesia, and fine sutures are applied and later removed within a few days⁴³. While the results are typically positive, potential risks include reduced sensitivity, scarring, or altered sensation^{39, 43}.

4.3.3. Lipofilling

Lipofilling (autologous fat grafting) is used in the rejuvenation of the intimate area, particularly for correcting postpartum scars (from episiotomy or perineal tears) and filling volume-deficient regions. The procedure involves harvesting the patient's fat tissue, purifying it, and injecting it into the targeted area. This promotes regeneration, improves texture and elasticity, and reduces discomfort or pain in the genital area⁴⁴.

The technique is considered safe and associated with a high level of patient satisfaction. However, there is still a lack of large-scale studies confirming its effectiveness in broader populations^{44, 45}. Lipofilling is sometimes combined with other therapies—such as growth factors—to optimize tissue regeneration outcomes⁴⁴.

4.3.4. Threads in Aesthetic Gynecology

Threads represent a relatively new technique used primarily for lifting the labia majora and tightening the upper vaginal segment^{46, 47}. The procedure involves the insertion of absorbable threads with microscopic barbs into specific tissue layers, enabling mechanical lifting and tissue remodeling^{46, 47}.

This treatment is typically performed in outpatient settings under local anesthesia, with minimal downtime. Patients may experience moderate discomfort and swelling post-procedure^{46, 47}. Preliminary clinical observations suggest that thread lifts are effective in improving tissue firmness, elevation, and overall comfort. However, long-term data on efficacy and safety remain limited^{39, 46, 47}.

Threads may serve as a minimally invasive alternative to surgical interventions, offering satisfactory results with lower procedural risk. Still, more studies are needed to evaluate long-term outcomes and standardize protocols^{46–48}.

4.4. Supportive and Maintenance Procedures

Supportive and maintenance treatments play a significant role in complementing the effects of invasive therapies and preventing age-related structural changes in the intimate area. Modern approaches to aesthetic gynecology also include non-invasive methods that improve skin tone, elasticity, and pigmentation. The most commonly used are chemical peels and carboxytherapy—both demonstrating high safety profiles and allowing for personalized treatment plans.

4.4.1. Chemical Peels and Skin Brightening of the Intimate Area

Peels and brightening procedures for the intimate area respond to the growing interest in anogenital aesthetics, particularly regarding hyperpigmentation and uneven skin tone. Main indications include age-related pigmentation, hormonal changes, chronic friction, tight clothing, and inflammatory conditions⁴⁹. A commonly used agent in such treatments is trichloroacetic acid (TCA), applied topically in precisely controlled concentrations. Its mechanism is based on epidermal exfoliation, which stimulates skin renewal and reduces discoloration⁴⁹.

These procedures are typically performed in outpatient settings and may also be integrated into broader aesthetic therapy plans—e.g., combined with laser or mesotherapy^{46, 47}. Their effectiveness stems from controlled dermal injury, which activates fibroblasts to produce collagen and rebuild tissue⁴⁹. The result is a more even skin tone, smoother surface, and visibly improved texture.

Due to the delicacy of intimate tissues and the need for accurate agent selection, such procedures should be performed by professionals familiar with the anatomy and physiology of the genital area⁵⁰. Potential side effects include redness, burning sensation, temporary hypopigmentation, or hypersensitivity—but these risks are minimized with proper patient qualification and adherence to protocol⁴⁹.

4.4.2. Carboxytherapy

Carboxytherapy—the intradermal or subcutaneous administration of medical-grade carbon dioxide—has found wide application not only in dermatology and aesthetic medicine but also in gynecology. The procedure leads to vasodilation, improved local blood flow, and stimulation of tissue regeneration. In the intimate area, carboxytherapy is primarily used to enhance skin elasticity, rejuvenate tissues, and support treatment of vaginal atrophy or scar correction⁵¹.

The mechanism involves triggering a localized inflammatory response that mobilizes connective tissue cells to produce collagen and elastin. Additionally, oxygenation and tissue metabolism are improved, leading to structural renewal of the skin⁵². In gynecology, carboxytherapy may also assist in managing vaginal dryness or postpartum scarring⁵⁰.

The procedure is minimally invasive and virtually painless—patients typically report only mild discomfort from tissue expansion during gas injection⁵¹. No recovery time is required, and the risk of complications is minimal, making it a desirable adjunct to aesthetic therapy⁵². Regular sessions can significantly improve skin quality and patient comfort.

5. Ethical and Legal Aspects

Contemporary aesthetic gynecology is experiencing dynamic growth, offering a broadening spectrum of procedures aimed at enhancing both the appearance and functionality of the intimate areas. However, the increasing availability of such interventions brings significant ethical and legal challenges, which demand careful consideration from both medical professionals and regulatory bodies. Due to the intimate nature of these procedures and their potential risks, aesthetic practices in gynecology must adhere to strict safety standards, obtain informed consent, and remain within clearly defined ethical and professional boundaries⁵³.

A central ethical concern in aesthetic gynecology is distinguishing between therapeutic interventions and procedures performed solely to meet aesthetic expectations. Certain treatments—such as postpartum reconstruction or therapy for vaginal atrophy—can have both medical and cosmetic indications, complicating their classification. The literature emphasizes that aesthetic gynecologic procedures should only be performed when medically justified, preceded by thorough qualification, and when they present no excessive risk⁵⁴.

Cultural and social factors also influence where the boundaries lie—patients' expectations may be shaped by media imagery, social pressures, or personal insecurities. In such cases, the physician's role is not only to assess medical eligibility but also to consider the ethical justification for the procedure. Moreover, creating artificial demand through aggressive marketing risks pathologizing normal anatomical diversity and promoting unattainable ideals⁵⁵.

Informed consent, based on comprehensive patient education, is a fundamental requirement for the ethical performance of aesthetic procedures in gynecology. Patients must be clearly informed about the goals, course, risks, and alternatives of the procedure⁵⁶. This education should also address psychological factors, and in certain cases—such as suspected body dysmorphic disorder—psychological or sexological consultation may be necessary^{46, 47, 57}.

It is essential for physicians to present realistic outcomes and not overpromise results. Only honest and transparent communication enables patients to make autonomous, informed decisions regarding elective interventions⁵⁸.

Legal frameworks governing aesthetic gynecology vary widely across countries. In many regions, including Poland, there are no specific regulations for individual aesthetic procedures; instead, general laws governing medical practice and ethical conduct apply.

Some countries, such as the United Kingdom and Germany, have introduced detailed guidelines concerning physician qualifications, documentation protocols, and patient education obligations for aesthetic procedures⁵⁹. In the United States, aesthetic gynecology is regulated through specialty societies and certification programs, with strict oversight of the devices and technologies used. The lack of international regulatory harmonization has contributed to the phenomenon of "medical tourism," whereby patients undergo procedures in jurisdictions with lower safety standards⁶⁰.

From a medical ethics perspective, it is crucial that physicians performing aesthetic gynecologic procedures adhere to the principle of *primum non nocere*—first, do no harm—and treat all patients with dignity, empathy, and respect, regardless of the perceived necessity of the procedure⁶¹.

6. The Future of Aesthetic Gynecology

Modern aesthetic gynecology is evolving rapidly, shifting toward what is increasingly described as regenerative and reconstructive gynecology. This terminological shift reflects a growing focus not only on appearance but also on functional and therapeutic benefits. Procedures such as labiaplasty, vaginoplasty, and vaginal rejuvenation are increasingly regarded as treatments aimed at improving patients' physical and psychological quality of life, rather than being purely cosmetic interventions^{36, 46, 47, 62}.

Technological advancement has enabled the emergence of newer devices that are beginning to replace older methods. For instance, microneedle radiofrequency and high-intensity focused ultrasound (HIFU) are demonstrating higher efficacy in treating urinary incontinence and vaginal laxity compared to previously dominant CO₂ lasers. Nevertheless, each technology maintains its place in clinical practice—CO₂ lasers remain particularly effective in managing vaginal atrophy due to their fractional mucosal effects^{36, 46, 47, 62}.

Combined therapy protocols are also gaining popularity. These approaches integrate various technologies and products—for example, combining microneedle radiofrequency with tropocollagen injections in the treatment of mixed urinary incontinence—producing synergistic effects and noticeably improving tissue tone around the urethra^{36, 46, 47, 62}.

Simultaneously, the psychological dimension is gaining recognition. Aesthetic-gynecologic procedures can significantly enhance patients' self-esteem, sexual health, and overall mental well-being⁶³. Thus, aesthetic gynecology is becoming increasingly interdisciplinary, merging advanced technologies with an emphasis on women's comfort and needs.

Aesthetic procedures in gynecology should not be viewed in isolation from a woman's broader health and psychosocial context. A multidisciplinary approach—bringing together experts from different medical fields—has become not just desirable but essential for modern patient-centered care⁶⁴.

There is a growing consensus on the need to establish collaborative therapeutic teams that include specialists such as gynecologists, dermatologists, plastic surgeons, endocrinologists, psychologists, and dietitians. This is particularly vital in cases involving trauma, childbirth, or oncologic surgery, where aesthetic and functional concerns overlap^{36, 46, 47, 62, 65}.

Such collaboration allows for a holistic understanding of a patient's needs. Treatments can then address not only the physical appearance of the intimate area but also hormonal, metabolic, and psychological aspects, leading to a more complete improvement in quality of life⁶⁴.

Moreover, this model centers the patient as an active decision-maker, engaged in every step of the therapeutic process. Personalized care, supported by specialist consultations and shared medical data, enhances treatment efficacy and fosters a strong, trust-based relationship between the patient and the medical team⁶⁴.

The process is further supported by digital technologies, such as electronic health records and secure communication platforms, facilitating real-time information sharing among professionals and improving continuity of care⁶⁴.

As interest in aesthetic-gynecologic procedures grows, so does the demand for standardized education and credentialing systems⁶². Both in Poland and internationally, there is increasing advocacy for certified training programs in aesthetic gynecology. These programs would combine theoretical knowledge with hands-on experience and ideally be endorsed by professional medical societies, thereby ensuring a high standard of care and patient safety^{36, 46, 47, 62}.

Equally important is training physicians in patient communication—helping them identify genuine needs, manage expectations, and propose procedures in an ethical and empathetic manner. A well-trained physician is not only technically competent but also capable of establishing respectful and supportive relationships with patients, recognizing the deeply personal nature of intimate health decisions^{63, 66}.

7. Discussion

Aesthetic gynecology—often termed regenerative and reconstructive gynecology—has transcended cosmetic enhancement to address multifaceted functional, hormonal and psychosexual concerns. This review illustrates that injectable modalities (e.g., hyaluronic acid, PRP), energy-based therapies (CO₂/Er:YAG lasers, radiofrequency, HIFU), surgical techniques (labiaplasty, clitoroplasty, lipofilling) and supportive treatments (carboxytherapy, chemical peels) can collectively restore tissue integrity, alleviate symptoms of menopause-related atrophy, incontinence and dyspareunia, and foster improved body image and intimate satisfaction.

However, the predominance of short-term, single-center studies limits our understanding of long-term safety and efficacy. The absence of standardized patient-selection criteria, treatment parameters and follow-up protocols contributes to variability in outcomes. Ethical considerations—particularly the risk of promoting

a narrow aesthetic ideal and the potential for overtreatment—underscore the necessity of rigorous psychological assessment and balanced patient education. Moreover, professional credentialing and regulatory guidelines have lagged behind rapid technological advances, creating inconsistencies in practitioner expertise and device utilization.

To advance the field, a concerted, multidisciplinary effort is needed: gynecologists, urogynecologists, dermatologists, plastic surgeons, sexologists and mental-health specialists must collaborate to develop evidence-based guidelines, conduct robust multicenter trials and establish comprehensive training and certification standards. Such integration will ensure that aesthetic gynecologic care remains safe, effective and aligned with patient-centered values.

8. Conclusions

Aesthetic gynecology plays a crucial role in bridging therapeutic restoration with aesthetic refinement, offering tangible benefits for women experiencing menopausal atrophy, postpartum changes, urinary dysfunction and genital self-consciousness. When delivered within an ethically sound, patient-focused framework—featuring clear communication of realistic outcomes, meticulous candidate evaluation and integrated psychological support—these interventions can markedly enhance physical comfort, sexual function and overall quality of life. Future progress depends on generating robust evidence through large-scale, long-term randomized trials that both validate the benefits and delineate potential risks; on harmonizing protocols by reaching consensus on treatment techniques, appropriate dosing and structured follow-up care to minimize variability; on establishing accredited training programs and formal certification pathways to ensure practitioner competence; and on maintaining ethical vigilance by strengthening informed-consent processes, normalizing the natural diversity of genital anatomy and discouraging marketing-driven demand. By uniting scientific rigor, systematic professional education and unwavering ethical stewardship, aesthetic gynecology can mature into an indispensable, fully integrated component of comprehensive women's health care.

REFERENCES

1. Garcia, B., Scheib, S., Hallner, B., Thompson, N., Schiavo, J., & Peacock, L. (2020). Cosmetic gynecology—a systematic review and call for standardized outcome measures. *International Urogynecology Journal*, 31(10), 1979–1995. <https://doi.org/10.1007/s00192-020-04294-5>
2. O'Connell, H. E., Sanjeevan, K. V., & Hutson, J. M. (2005). Anatomy of the clitoris. *Journal of Urology*, 174(4 Part 1), 1189–1195. <https://doi.org/10.1097/01.ju.0000173639.38898.cd>
3. Calleja-Agius, J. (2021). Surgical anatomy of the female pelvis. In *The EBCOG postgraduate textbook of obstetrics & gynaecology* (pp. 1–7).
4. Palacios, S., Castelo-Branco, C., Currie, H., et al. (2015). Update on management of genitourinary syndrome of menopause: A practical guide. *Maturitas*, 82(3), 308–313. <https://doi.org/10.1016/j.maturitas.2015.07.020>
5. Nappi, R. E., & Palacios, S. (2014). Impact of vulvovaginal atrophy on sexual health and quality of life at postmenopause. *Climacteric*, 17(1), 3–9. <https://doi.org/10.3109/13697137.2013.871696>
6. Mac Bride, M. B., Rhodes, D. J., & Shuster, L. T. (2010). Vulvovaginal atrophy. *Mayo Clinic Proceedings*, 85(1), 87–94. <https://doi.org/10.4065/mcp.2009.0413>
7. Perino, A., Calligaro, A., Forlani, F., et al. (2015). Vulvo-vaginal atrophy: A new treatment modality using thermo-ablative fractional CO₂ laser. *Maturitas*, 80(3), 296–301. <https://doi.org/10.1016/j.maturitas.2014.12.006>
8. Sharp, G., & Tiggemann, M. (2016). Educating women about normal female genital appearance variation. *Body Image*, 16, 70–78. <https://doi.org/10.1016/j.bodyim.2015.11.006>
9. Sorice, S. C., Li, A. Y., Canales, F. L., & Furnas, H. J. (2017). Why women request labiaplasty. *Plastic and Reconstructive Surgery*, 139(4), 856–863. <https://doi.org/10.1097/PRS.0000000000003181>
10. Goodman, M. P. (2011). Female genital cosmetic and plastic surgery: A review. *The Journal of Sexual Medicine*, 8(6), 1813–1825. <https://doi.org/10.1111/j.1743-6109.2011.02254.x>
11. Agrawal, S., LaPier, Z., Nagpal, S., et al. (2024). A randomized, pilot trial comparing vaginal hyaluronic acid to vaginal estrogen for the treatment of genitourinary syndrome of menopause. *Menopause*, 31(9), 750–755. <https://doi.org/10.1097/GME.0000000000002390>
12. Dos Santos, C. C. M., Uggioni, M. L. R., Colonetti, T., Colonetti, L., Grande, A. J., & Da Rosa, M. I. (2021). Hyaluronic acid in postmenopause vaginal atrophy: A systematic review. *The Journal of Sexual Medicine*, 18(1), 156–166. <https://doi.org/10.1016/j.jsxm.2020.10.016>
13. Thom, D. H., & Rortveit, G. (2010). Prevalence of postpartum urinary incontinence: A systematic review. *Acta Obstetrica et Gynecologica Scandinavica*, 89(12), 1511–1522. <https://doi.org/10.3109/00016349.2010.526188>

14. Milsom, I., & Gyhagen, M. (2025). What factors are predictive of urinary continence following pregnancy? *Continence*, 13, 101746. <https://doi.org/10.1016/j.cont.2025.101746>
15. Schick, V. R., Calabrese, S. K., Rima, B. N., & Zucker, A. N. (2010). Genital appearance dissatisfaction: Implications for women's genital image self-consciousness, sexual esteem, sexual satisfaction, and sexual risk. *Psychology of Women Quarterly*, 34(3), 394–404. <https://doi.org/10.1111/j.1471-6402.2010.01584.x>
16. Chappell, A. G., Sasson, D. C., Soriano, A. J., Jordan, S. W., & Percec, I. (2021). Influence of self-perceived vulvar appearance on female sexual function. *Aesthetic Surgery Journal*, 41(7), 794–802. <https://doi.org/10.1093/asj/sjab012>
17. Ortega-Sánchez, I., Lucha-López, M. O., & Monti-Ballano, S. (2025). Motivational factors for labiaplasty: A systematic review of medical research. *Journal of Clinical Medicine*, 14(8), 2686. <https://doi.org/10.3390/jcm14082686>
18. Boucher, F., Eychenne, C., Gurriet, B., et al. (2025, March 3). Evaluation of the efficacy and safety of hyaluronic acid injection for volume restoration of the labia majora: ESOLANE study. *International Urogynecology Journal*. <https://doi.org/10.1007/s00192-025-06094-1>
19. Tarabini, F., Rozemberg, L., Zapata-Sudo, G., & Braz, A. (2023, September 21). A novel hyaluronic acid filling technique for restoring volume of the labia majora. *Cureus*. <https://doi.org/10.7759/cureus.45728>
20. Karaosmanoglu, O., Cogendez, E., Sozen, H., Asoglu, M. R., Akdemir, Y., & Eren, S. (2011). Hyaluronic acid in the treatment of postmenopausal women with atrophic vaginitis. *International Journal of Gynecology & Obstetrics*, 113(2), 156–157. <https://doi.org/10.1016/j.ijgo.2010.12.007>
21. Fidicicchi, T., & Gambacciani, M. (2025). Hyaluronic acid and erbium laser for the treatment of genitourinary syndrome of menopause. *Climacteric*, 28(1), 87–92. <https://doi.org/10.1080/13697137.2024.2418492>
22. Gupta, A. K., & Taylor, D. (2024, October 22). Bibliometric analysis of platelet-rich plasma treatment for hair restoration, facial rejuvenation, dental procedures, and gynecological rejuvenation. *Skin Appendage Disorders*. <https://doi.org/10.1159/000541528>
23. Mammoto, T., Jiang, A., Jiang, E., & Mammoto, A. (2013). Platelet rich plasma extract promotes angiogenesis through the angiopoietin1-Tie2 pathway. *Microvascular Research*, 89, 15–24. <https://doi.org/10.1016/j.mvr.2013.04.008>
24. Gaber, M., & Shaltout, S. (2021). Assessment of autologous platelet-rich plasma as a local therapy for female sexual dysfunction. *Menoufia Medical Journal*, 34(1), 61. https://doi.org/10.4103/mmj.mmj_228_19
25. Dankova, I., Pyrgidis, N., Tishukov, M., et al. (2023). Efficacy and safety of platelet-rich plasma injections for the treatment of female sexual dysfunction and stress urinary incontinence: A systematic review. *Biomedicines*, 11(11), 2919. <https://doi.org/10.3390/biomedicines11112919>
26. Waghe, T., Acharya, N., Karnik, M., Mohammad, S., Patel, N. A., & Gemnani, R. (2024, January 31). Role of platelet-rich plasma in genitourinary syndrome of menopause. *Cureus*. <https://doi.org/10.7759/cureus.53316>
27. Luo, F. Y., Nasr-Esfahani, M., Jarrell, J., & Robert, M. (2020). Botulinum toxin injection for chronic pelvic pain: A systematic review. *Acta Obstetrica et Gynecologica Scandinavica*, 99(12), 1595–1602. <https://doi.org/10.1111/aogs.13946>
28. Parenti, M., Degliomini, R. S., Cosmi, E., et al. (2023). Botulinum toxin injection in vulva and vagina: Evidence from a literature systematic review. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 291, 178–189. <https://doi.org/10.1016/j.ejogrb.2023.10.028>
29. Moga, M., Dimienescu, O., Bălan, A., Scârnciu, I., Barabaş, B., & Pleş, L. (2018). Therapeutic approaches of botulinum toxin in gynecology. *Toxins*, 10(4), 169. <https://doi.org/10.3390/toxins10040169>
30. Muhammad, T., & Gupta, V. (2023). Dyspareunia. In *StatPearls* [Internet]. Treasure Island (FL): StatPearls. <https://www.ncbi.nlm.nih.gov/books/NBK562159/>
31. Gowda, A., Healey, B., Ezaldein, H., & Merati, M. (2021). A systematic review examining the potential adverse effects of microneedling. *Journal of Clinical and Aesthetic Dermatology*, 14(1), 45–54.
32. Maia, R. R., Sarmiento, A. C., Silva, R. M. V. da, et al. (2022). Comparative effects of fractional radiofrequency and microneedling on the genitalia of postmenopausal women: Histological and clinical changes. *Clinics*, 77, 100117. <https://doi.org/10.1016/j.clinsp.2022.100117>
33. Karcher, C., & Sadick, N. (2016). Vaginal rejuvenation using energy-based devices. *International Journal of Women's Dermatology*, 2(3), 85–88. <https://doi.org/10.1016/j.ijwd.2016.05.003>
34. Tadir, Y., Gaspar, A., Lev-Sagie, A., et al. (2017). Light and energy based therapeutics for genitourinary syndrome of menopause: Consensus and controversies. *Lasers in Surgery and Medicine*, 49(2), 137–159. <https://doi.org/10.1002/lsm.22637>
35. Gaspar, A., Maestri, S., Silva, J., et al. (2018). Intraurethral Erbium:YAG laser for the management of urinary symptoms of genitourinary syndrome of menopause: A pilot study. *Lasers in Surgery and Medicine*, 50(8), 802–807. <https://doi.org/10.1002/lsm.22826>
36. De La Fourniere, B., Basso, M., Dairien, M., et al. (2024). Current and future role of HIFU in obstetric gynaecology. *IRBM*, 45(1), 100819. <https://doi.org/10.1016/j.irbm.2023.100819>

37. González Isaza, P., Jaguszewska, K., Cardona, J. L., & Lukaszuk, M. (2018). Long-term effect of thermoablative fractional CO₂ laser treatment as a novel approach to urinary incontinence management in women with genitourinary syndrome of menopause. *International Urogynecology Journal*, 29(2), 211–215. <https://doi.org/10.1007/s00192-017-3352-1>
38. Barbara, G., Facchin, F., Buggio, L., Alberico, D., Frattaruolo, M., & Kustermann, A. (2017). Vaginal rejuvenation: Current perspectives. *International Journal of Women's Health*, 9, 513–519. <https://doi.org/10.2147/IJWH.S99700>
39. Willis, R. N., Szymanski, K. D., & Patel, B. C. (2025). Labiaplasty, minora reduction. In *StatPearls* [Internet]. Treasure Island (FL): StatPearls. <http://www.ncbi.nlm.nih.gov/pubmed/19825476>
40. Géczi, A. M., Varga, T., Vajna, R., et al. (2024). Comprehensive assessment of labiaplasty techniques and tools, satisfaction rates, and risk factors: A systematic review and meta-analysis. *Aesthetic Surgery Journal*, 44(11), NP798–NP808. <https://doi.org/10.1093/asj/sjae143>
41. Aleem, S., & Adams, E. J. (2012). Labiaplasty. *Obstetrics, Gynaecology & Reproductive Medicine*, 22(2), 50–53. <https://doi.org/10.1016/j.ogrm.2011.11.006>
42. Miklos, J. R., & Moore, R. D. (2008). Labiaplasty of the labia minora: Patients' indications for pursuing surgery. *The Journal of Sexual Medicine*, 5(6), 1492–1495. <https://doi.org/10.1111/j.1743-6109.2008.00813.x>
43. Author(s) unknown. (2012). Chapter 123 – Disorders of sexual development. In *Pediatric Surgery* (7th ed., pp. 1565–1590). Elsevier.
44. Ulrich, D., Ulrich, F., van Doorn, L., & Hovius, S. (2012). Lipofilling of perineal and vaginal scars. *Plastic and Reconstructive Surgery*, 129(3), 593e–594e. <https://doi.org/10.1097/PRS.0b013e3182419c2c>
45. Silvestri, D. (2008). The vulva: Anatomy, physiology, and pathology. *Journal of the American Academy of Dermatology*, 58(2), 357–358. <https://doi.org/10.1016/j.jaad.2007.10.644>
46. Dankova, I., Pyrgidis, N., Tishukov, M., et al. (2023). Efficacy and safety of platelet-rich plasma injections for the treatment of female sexual dysfunction and stress urinary incontinence: A systematic review. *Biomedicines*, 11(11), 2919. <https://doi.org/10.3390/biomedicines11112919>
47. Abdulkadir, J., Rodriguez, M. I., & Say, L. (2015). A systematic review of the evidence on clitoral reconstruction after female genital mutilation/cutting. *International Journal of Gynecology & Obstetrics*, 129(2), 93–97. <https://doi.org/10.1016/j.ijgo.2014.11.008>
48. T., T., M., S., & M., T. (2022). The use of the minimally invasive APTOS thread method for the treatment of female stress urinary incontinence: 3-year follow-up results. *Annals of Minimally Invasive Surgeries*, 4(1). <https://doi.org/10.36959/351/596>
49. Tabakova, N. (2023). Treatment of pigmentation in the anogenital area with the use of trichloroacetic acid: A case report. *Archiv Euromedica*, 13(2). <https://doi.org/10.35630/2023/13/2.417>
50. Verma, M. (2023). Cosmetic gynecology: An emerging subspecialty of obstetrics and gynecology. *MGM Journal of Medical Sciences*, 10(2), 346–351. https://doi.org/10.4103/mgmj.MGMJ_239_22
51. H., Z. (2017). Carboxytherapy – a non-invasive method in aesthetic medicine and dermatology, and the combined usage of carboxytherapy and PRP in the periorbital area. *Global Dermatology*, 4(1). <https://doi.org/10.15761/GOD.1000202>
52. Elias, J., Carbone, A., Gaspar, A., et al. (2012). M514 local carboxytherapy: New technology for gynecologists and obstetricians to accelerate and improve the closure of dehiscence surgical wounds. *International Journal of Gynecology & Obstetrics*, 119(S3). [https://doi.org/10.1016/S0020-7292\(12\)61702-0](https://doi.org/10.1016/S0020-7292(12)61702-0)
53. Kamlesh, C., & Sravya, G. (n.d.). The pinnacle of feminine elegance: A comprehensive review of aesthetic gynaecology practices. *Obstetrics and Gynaecology Forum*.
54. Liao, L. M., & Creighton, S. M. (2007). Requests for cosmetic genitoplasty: How should healthcare providers respond? *BMJ*, 334(7603), 1090–1092. <https://doi.org/10.1136/bmj.39206.422269.BE>
55. Braun, V. (2005). In search of (better) sexual pleasure: Female genital “cosmetic” surgery. *Sexualities*, 8(4), 407–424. <https://doi.org/10.1177/1363460705056625>
56. Shaw, D., Allen, L., Chan, C., et al. (2022). Guideline No. 423: Female genital cosmetic surgery and procedures. *Journal of Obstetrics and Gynaecology Canada*, 44(2), 204–214.e1. <https://doi.org/10.1016/j.jogc.2021.11.001>
57. Sarwer, D. B., & Crerand, C. E. (2004). Body image and cosmetic medical treatments. *Body Image*, 1(1), 99–111. [https://doi.org/10.1016/S1740-1445\(03\)00003-2](https://doi.org/10.1016/S1740-1445(03)00003-2)
58. Stangierska, I., & Horst-Sikorska, W. (2007). Ogólne zasady komunikacji między pacjentem i lekarzem. *Forum Medycyny Rodzinnej*, 1(1).
59. Robson, S. J. (2022, September 9). Why license non-medics to perform non-surgical cosmetic treatments at all? *BMJ*. <https://doi.org/10.1136/bmj.o2191>
60. Hery, D., Schwarte, B., Patel, K., Elliott, J. O., & Vasko, S. (2024). Plastic surgery tourism: Complications, costs, and unnecessary spending? *Aesthetic Surgery Journal Open Forum*, 6. <https://doi.org/10.1093/asjof/ojad113>
61. Kamlesh, C., & Sravya, G. (n.d.). The pinnacle of feminine elegance: A comprehensive review of aesthetic gynaecology practices. *Obstetrics and Gynaecology Forum*.
62. Verma, M. (2023). Cosmetic gynecology: An emerging subspecialty of obstetrics and gynecology. *MGM Journal of Medical Sciences*, 10(2), 346–351. https://doi.org/10.4103/mgmj.MGMJ_239_22

63. Marano, G., Anesini, M. B., Sfratta, G., et al. (2025). Aesthetic gynecology and mental health: What does it really mean for women? *Cosmetics*, 12(1), 28. <https://doi.org/10.3390/cosmetics12010028>
64. Sarwer, D. B., & Spitzer, J. C. (2012). Body image dysmorphic disorder in persons who undergo aesthetic medical treatments. *Aesthetic Surgery Journal*, 32(8), 999–1009. <https://doi.org/10.1177/1090820X12462715>
65. Verma, M. (2023). Cosmetic gynecology: An emerging subspecialty of obstetrics and gynecology. *MGM Journal of Medical Sciences*, 10(2), 346–351. https://doi.org/10.4103/mgmj.MGMJ_239_22
66. Mohammad, S., Joshi, K. S., Mohammad, S., & Acharya, N. (2023, August 28). Aesthetic gynaecology: What women want? *Cureus*. <https://doi.org/10.7759/cureus.44251>