



Manual
on
**COSMETIC
GYNECOLOGY**

Series Editors

**Nandita Palshetkar
Hrishikesh D Pai
Niranjan Chavan**

Editors

**Sejal Ajmera
Neharika Malhotra
Apurba Kumar Dutta**

Co-Editors

**Navneet Magon
Neeraj Jadhav
Suyesha Khanijao
Chandini Kharat
Zeel Shah
Snighda Kumar**



JAYPEE

1. History of Aesthetic and Functional Gynecology	1
<i>Sejal Ajmera, Raineer Agrawal</i>	
2. Cosmetic Gynecology: Scope, Evolution and Need	6
<i>Jaideep Malhotra, Narendra Malhotra, Neharika Malhotra</i>	
3. Clinical Anatomy: Perineum, Labia, and Pelvic Floor	15
<i>Jay Mehta</i>	
4. Informed Consent and Legal Considerations for Practice of Aesthetic Gynecology	18
<i>Parneet Kaur Sekhon</i>	
5. Vaginoplasty and Perineoplasty	21
<i>Sebanti Goswami</i>	
6. Labiaplasty	24
<i>Parul Saoji</i>	
7. Hymen Reconstruction: Understanding the Procedure and Its Implications	29
<i>Maalavika Appasani</i>	
8. Labia Majora Augmentation	31
<i>Purvi Khatri, Krupa Bhagat</i>	
9. Complications of Female Cosmetic Gynecological Surgery.....	37
<i>Milind R Shah, Naval Shah</i>	
10A. EBDs: Clinical Uses and Efficacy—Radiofrequency in Aesthetic Gynecology	43
<i>Deepali Gupta</i>	
10B. EBDs: Clinical Uses and Efficacy—CO₂ Lasers in Cosmetic Gynecology.....	48
<i>Surakshith Battina</i>	
10C. EBDs: Clinical Uses and Efficacy— Erbium Lasers in Aesthetic Gynecology and Regenerative Medicine.....	51
<i>Vidya Pancholia</i>	
10D. EBDs: Clinical Uses and Efficacy—Diode Laser in Cosmetic Gynecology.....	61
<i>AL Satyavati</i>	

- 10E. EBDs: Clinical Uses and Efficacy—HIFU (High-intensity Focused Ultrasound) 66**
Manish Mahajan
- 11. High-intensity Focused Electromagnetic Technology: A Breakthrough, Noninvasive Technology for Treatment of Urinary Incontinence..... 72**
Preeti Jindal, Ridhi Gulati, Muskan Mittal
- 12. Carboxytherapy..... 79**
Preeti Jindal, Pragati Tandon, Muskan Mittal
- 13. Platelet-rich Plasma Therapy: A Perspective into Treating Gynecological Disorders..... 85**
Prabhu Chandra Mishra, Neharika Malhotra
- 14. Managing Vaginismus with Botulinum Toxin: A Clinical Perspective 103**
Bela Shah Jain, Naval Shah
- 15. Exosomes and Platelet-rich Plasma: Clinical Aspects in Cosmetic and Functional Gynecology 108**
Rupinder Kaur Ruprai
- 16. Stem Cells and Gynecology 114**
Poonam Mishra
- 17. Neovagina: Techniques, Innovations, and Future Directions..... 117**
Manjula Anagani, Sindura Gadde
- 18. Vulval Skin Lightening and Brightening 127**
Savana Chongtham
- 19. Ovarian Rejuvenation 131**
Preeti Jindal, Neharika Malhotra, Sumitu Sahdev, Muskan Mittal
- 20. Regenerative Therapies for Thin Endometrium: PRP, Stem Cells, Exosomes, and Other Approaches..... 139**
Jaideep Malhotra, Narendra Malhotra, Keshav Malhotra, Neharika Malhotra



History of Aesthetic and Functional Gynecology

Sejal Ajmera, Raine Agrawal

■ INTRODUCTION

Cosmetic gynecology has evolved as an important field within women's health, blending aesthetic procedures with gynecological expertise. The roots of cosmetic gynecology, however, stretches back through centuries of cultural practices, medical advancements, and evolving societal norms related to female anatomy and beauty.

■ ADVENT AND EVOLUTION OF SURGICAL PROCEDURES

Surgical procedures for suturing vaginal lacerations postdelivery were first described by Trotula in 1050 AD in treatments for women.

In a study from India, female genital cosmetic surgery has increased by 30% from 2012 to 2016.¹

Vaginoplasty

Vaginoplasty's roots trace to the mid-19th century, with J Marion Sims pioneering vesicovaginal fistula repair techniques.

In the late 1950s, Dr James Burt's controversial surgeries aimed to enhance women's sexual experiences, indirectly sparking interest in functional and aesthetic vaginal surgeries.

In the early 20th century, perineorrhaphy emerged, followed by posterior colporrhaphy in the mid-century, treating vaginal laxity and prolapse but not cosmetic concerns.

Aesthetic demands led to the advent of cosmetic vaginoplasty in the 1980s, popularized by gynecologists like Dr David Matlock (USA), who pioneered the use of lasers to perform precise incisions for vaginal tightening.²

Hymenoplasty

In the 1850s, a German physician, Dr Bernhard Sigmund Schultze, was one of the earliest to describe and document a hymen repair surgery particularly among women who feared social consequences due to the loss of virginity.³

The rise of the internet in the late 1990s and early 2000s facilitated the spread of information about hymenoplasty, making the procedure more accessible to women who were seeking it but did not know where to go. Vaginoplasty is often combined with hymenoplasty.

Labiaplasty

Historically, labial hypertrophy was inconsequential, but now aesthetic and functional concerns are recognized.

In 1655, *Armamentarium Chirurgicum* had an illustration of clitoral hypertrophy excision by a German surgeon. In 1739, *Institutiones Chirugicae*, a detailed labiaplasty was described. A simple labiaplasty amputation was done by Radmann in 1976. A detailed description of aesthetic labiaplasty was published in 1983.⁴ At that time, the only technique used to reduce the labia minora was the “trim method.” However, there were drawbacks like superficial dyspareunia and accentuated clitoral prepuce. In the 1990s, alternative labiaplasty techniques were developed, including the “wedge technique” described by Dr Gary Alter in 1998.⁵

In the 2000s, laser and radiofrequency (RF) techniques improved tissue removal and healing, with “Barbie look” labiaplasty gaining popularity in 2005. By the 2010s, curvilinear labiaplasty and wedge resection became standard, often paired with clitoral hood reduction for balanced aesthetics.

■ NONSURGICAL PROCEDURES

Platelet-rich Plasma

Over 20 years it has been studied in wound care, orthopedics, dental surgery, spine literature, and a variety of cosmetic surgery procedures.

Marx applied it to mandibular defects in 1998, and its use has since expanded to gynecology and dermatology.

The O-Shot (Orgasm Shot), introduced by Dr Runels in 2011, became a milestone in sexual function enhancement. This procedure involved injecting PRP into areas like the clitoris and vaginal walls to increase sensitivity, lubrication, and overall sexual response. He also used it to treat lichen sclerosus, and introduced the “Vampire Wing Lift”.

Today PRP is used for genitourinary syndrome of menopause (GSM), female sexual dysfunction (O-Shot, G-Shot therapy,⁶ and lichen sclerosus treatment.

Energy-based Devices

Laser

Laser is an acronym that stands for light amplification by the stimulated emission of radiation, a concept that was developed by Einstein in 1917.

Introduced in 1961, the CO₂ laser gained widespread use in gynecology after Kaplan and colleagues first used it for cervical erosion treatment in 1973, followed by Bellina for cervical intraepithelial neoplasia (CIN) and fallopian tube microsurgery.

In 2010, The MonaLisa Touch, a fractional CO₂ laser, received FDA clearance for treating vulvovaginal atrophy (VVA).⁷ The trial of CO₂ lasers in Indian women was done in 2013 in Mumbai, where 35 patients were studied for effects on vaginal tightening and mild to moderate stress urinary incontinence (SUI).

In the 1990s, the erbium:yttrium-aluminum-garnet (Er:YAG) laser was introduced as a versatile option in cosmetic and gynecological applications, offering precise tissue ablation with less thermal damage. After 2010, the Er:YAG laser became increasingly popular for vaginal rejuvenation and other cosmetic procedures, leveraging its ability to stimulate collagen production while minimizing downtime.

Currently, laser is used to treat dryness, decreased lubrication, dysuria, altered vaginal flora, vaginal laxity, lichen sclerosus in patients in menopause and even in patients after cancer vaginal radiotherapy or systemic hormonal chemotherapy.

Radiofrequency

Initially used for cauterization, RF technology was adapted in 2002 by ThermoCool (SoltaMedical, Inc.) for skin tightening and facial wrinkle treatment after receiving Food and Drug Administration (FDA) approval for its 6-MHz frequency device.

In the 2000s, Dr Red Alinsod began utilizing RF devices in his practice, particularly for vaginal rejuvenation. He played a crucial role in popularizing the use of RF for treating conditions such as vaginal laxity, dryness, and urinary incontinence.⁸

ThermiVa, launched in 2011, gained FDA approval in 2015 for treating vaginal laxity with RF technology.

The first global conversation on RF in aesthetic and functional gynecology was conducted from Mumbai — Indian Academy of Vaginal Aesthetics (IAVA) in 2018, where physicians from across 26 countries participated.

The RF, an energy-based device is currently used to improve genital appearance, sexual function, stress urinary incontinence, lubrication, vaginal laxity, genitopelvic sensation, bowel incontinence, pelvic organ prolapses (POP), and chronic pelvic pain.

A study done on Indian women that included forty-eight patients complaining of sexual dysfunction has shown RF to improve feminine intimate health.⁹

High-intensity Focused Ultrasound

HIFU (high-intensity focused ultrasound) was first investigated for noninvasive ablation in the early 1940s, and in 1994, the first commercial HIFU machine for benign prostatic hyperplasia was launched in Europe; by October 2004, the FDA approved HIFU for treating symptomatic uterine fibroids, and it has since shown promise for placenta accreta, adenomyosis, and endometriosis.

In aesthetic gynecology, HIFU started being used recently, with good study results mostly after 2017. It was shown that intravaginal HIFU therapy results in vaginal tightening, urinary incontinence improvement, and atrophy and genitourinary syndrome treatment.¹⁰

Electromagnetic Stimulation

In recent years, body shaping has emerged as an increasingly popular and growing area in cosmetic medicine. Magnetic stimulation increases muscle mass and reduces fat volume. High-intensity focused electromagnetic field (HIFEM) and functional magnetic muscle stimulation (FMS) are the common technologies used. HIFEM was approved by the National Medical Products Administration in 2019 to improve the contour of the hip and abdomen.

The electromagnetic field passes in a noninvasive manner and the high frequency of action potentials leads to selective and supramaximal muscle contractions.

The pelvic floor muscles, which are crucial for urinary and bowel control as well as sexual function, were an ideal target for this technology due to their deep location and importance in overall pelvic stability.

A study published in 2020 on a total of 95 patients compared two intervention groups treated with HIFEM (G1) procedure and electrical stimulation (G2), along with the control group (G3), results show that women of age 18–45 years, who had vaginal delivery, have better results using HIFEM.¹⁰ Another study in 2019 included 75 women with symptoms of stress, urge or mixed urinary incontinence, reported a significant reduction of their symptoms using HIFEM treatment.

■ CONCLUSION

Vaginal rejuvenation procedures are increasing in popularity in terms of types of treatment offered, number of patients undergoing them, clinical studies, and in the controversy surrounding them. Both noninvasive and invasive solutions are being developed by pharmaceutical and technological companies.^{11,12}

Today, cosmetic gynecology integrates advanced technologies with a focus on improving quality of life for women, reflecting the dynamic nature of the field and the commitment to patient-centered outcomes.

As gynecologists, understanding this evolution helps to ensure a well-rounded approach to care, combining aesthetic goals with functional health.

■ REFERENCES

1. Desai SA, Dixit VV. Audit of female genital aesthetic surgery: changing trends in India. *J Obstet Gynaecol India*. 2018;68:214-20.
2. Goodman MP, Placik OJ, Benson III RH, Miklos JR, Moore RD, Jason RA, et al. A large multicenter outcome study of female genital plastic surgery. *J Sex Med*. 2010;7(4_Part_1):1565-77.
3. Baskett TF. *Eponyms and names in obstetrics and gynaecology*. Cambridge University Press; 2019.
4. Chang P, Salisbury MA, Narsete T, Bucksan R, Derrick D, Ersek RA. Vaginal labiaplasty: defense of the simple “clip and snip” and a new classification system. *Aesthetic Plast Surg*. 2013;37:887-91.
5. Alter GJ, Alter GJ. A new technique for aesthetic labia minora reduction. *Ann Plast Surg*. 1998;40(3):287-90.
6. Runels C, Melnick H, Debourbon E, Roy L. A pilot study of the effect of localized injections of autologous platelet rich plasma (PRP) for the treatment of female sexual dysfunction. *J Women’s Health Care*. 2014;3(169):2167-0420.
7. Prasad AJ, Pai GS, Pai AH. *Laser in aesthetic and regenerative gynecology: physics, types, applications, safety profiles*. aesthetic and regenerative gynecology. Singapore: Springer Nature Singapore; 2022. pp . 53-66.
8. Alinsod RM. Transcutaneous temperature-controlled radiofrequency for orgasmic dysfunction. *Lasers Surg Med*. 2016;48(7):641-5.
9. Desai SA, Vakil Z, Kroumpouzou G. Transcutaneous temperature-controlled radiofrequency treatment: Improvement in female genital appearance, sexual dysfunction, and stress urinary incontinence. *Aesthet Surg J*. 2021;41(12):1400-8.
10. Bader A, Gynecologist C (Eds). *Aesthetic Gynecology Rejuvenation*. CRC Press, Taylor & Francis Group; 2024.
11. Desai SA, Kroumpouzou G, Sadick N. Vaginal rejuvenation: From scalpel to wands. *Int J Womens Dermatol*. 2019;5(2):79-84.
12. Kroumpouzou G, Desai SA, Messas T. Energy-Based Devices for Vulvovaginal Rejuvenation. *Adv Cosmetic Surg*. 2023;6(1):71-87.

Manual on COSMETIC GYNECOLOGY



Nandita Palshetkar is the Professor Emeritus, Department of Obstetrics and Gynecology, DY Patil School of Medicine, Navi Mumbai, Maharashtra, India. She is a Past President of FOGSI (2019) and Director of Bloom IVF Group, Mumbai, Maharashtra, India.



Hrishikesh D Pai is the Trustee FIGO of Asia Oceania (2023–25), Immediate Past President of FOGSI (2022–23), and Founder & Medical Director of Bloom IVF Group, Mumbai, Maharashtra, India.



Niranjan Chavan is a Professor and Unit Chief in the Department of Obstetrics & Gynecology of LTMM College and Sion Hospital, Mumbai, India. He is Treasurer FOGSI (2025–27), Past President MOGS (2022–23), Organising Secretary AICOG 2025 Mumbai, Vice President AFG (2025–26) and Secretary General MAGE. He is the Editor-in-Chief of JGOG, TOA, FEMAS journals and has edited 12 textbooks, 92 Publications, 224 citations and has 30 awards to his credit.



Sejal Ajmera is the Professor at Juhu, Surya Hospital Santacruz, and DY Patil Hyderabad. She is the Founder President of IAVA (Indian Academy of Vaginal Aesthetics).



Neharika Malhotra is Consultant at Rainbow IVF. Immediate Past Chairperson FOGSI Young Talent Promotion Committee (2020–23). Joint Secretary FOGSI (2018).



Apurba Kumar Dutta is Consultant Cosmetic and Laparoscopic Gynecologist at Shree Durga Clinic and Fertility Centre, Bhuli, Jharkhand, India. Associate Professor, IQ CITY Medical College and Hospital Durgapur, West Bengal, India.

Printed in India



Available at all medical bookstores
or buy online at www.ejaypee.com



JAYPEE BROTHERS
Medical Publishers (P) Ltd.
EMCA House, 23/23-B, Ansari Road,
Daryaganj, New Delhi - 110 002, INDIA
www.jaypeebrothers.com

Join us on [facebook.com/JaypeeMedicalPublishers](https://www.facebook.com/JaypeeMedicalPublishers)
Follow us on [instagram.com/JaypeeMedicalPublishers](https://www.instagram.com/JaypeeMedicalPublishers)

Shelving Recommendation
OBSTETRICS & GYNECOLOGY

