

Vaginoplasty and Perineoplasty

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Normal vaginal delivery can result in widening of the vagina by stretching the tissues and separating the adjacent muscles. Postpartum vaginal laxity can create a gaping perineum and reduce friction sensation, diminishing sexual satisfaction.^{1,2} Although surgical vaginal tightening procedures are not new, historically they have been performed for repairs after obstetrical delivery, rather than for sexual or aesthetic concerns.³ The few studies that have been done show that vaginal tightening procedures, including vaginoplasty and perineoplasty, are associated with improved sexual function with low complication rates.¹⁻⁴ Reported complication rates include inadvertent rectal entry of 2% and minor complication rates with no long-term sequelae ranging from 3.8% to 19.7%.³

The terms vaginoplasty and perineoplasty are used broadly and variably. In this video, a vaginoplasty incorporates a perineoplasty with the addition of tightening of the proximal posterior vaginal canal. Redundant vaginal mucosa is excised, and the levator ani muscles are approximated.^{1-3,5}

A perineoplasty narrows the genital hiatus length,⁴ removes redundant perineal skin and distal vaginal mucosa, and tightens the introitus with approximation of the superficial transverse perineal and bulbocavernosus muscles.^{4,5} This procedure is ideal for patients without complaints of vaginal laxity, but who are interested in improving the appearance and sexual function of a postpartum perineum.⁴

Potential complications of vaginal tightening procedures include dyspareunia, vaginal dryness, vaginal and perineal restriction, and rectovaginal fistula. Women with pelvic organ prolapse, rectocele, cystocele, obstructed defecation, or urinary or anal incontinence are not candidates for vaginal tightening procedures.⁴ During a vaginal examination, while the patient bears down and tightens, the surgeon can assess the vaginal width and the levator ani muscles.⁵

This video features an operative technique for vaginoplasty and perineoplasty that recreates prepartum anat-



Video Graphic 1. See video, Supplemental Digital Content 1, which displays a surgical technique for vaginoplasty (introitus and vaginal canal tightening with perineal gap closure) and perineoplasty (introitus tightening and perineal gap closure) are demonstrated in this step-by-step narrated video. This video is available in the "Related Video" section of PRSGlobalOpen.com or at <http://links.lww.com/PRSGO/A599>. Permission for Use of Image: The authors purchased a license from the Netter company to use the Frank Netter image in the video.

my and minimizes complications [see video, Supplemental Digital Content 1, which displays a surgical technique for vaginoplasty (introitus and vaginal canal tightening with perineal gap closure) and perineoplasty (introitus tightening and perineal gap closure) are demonstrated in this step-by-step narrated video, <http://links.lww.com/PRSGO/A599>). The procedures are performed under general anesthesia, although some surgeons prefer local anesthesia with oral or intravenous sedation. Tumescence solution (1 cc of 1:1,000 epinephrine in 500 cc's of normal saline) injected between the vaginal and rectal mucosa layers offers hemostasis, while acting as a spacer to protect against a rectovaginal fistula.

Preoperative marks are made from 5:00 to 7:00, extending around the attenuated perineal skin, anterior to the anal sphincter. For a vaginoplasty, the apex of the intravaginal V is marked approximately 10 cm proximal to the hymen ring, allowing visualization of the levators. The intravaginal perineoplasty marks extend just beyond the hymen ring.

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During a vaginoplasty, the vaginal mucosa is elevated with a combination of sharp and blunt dissection until the levators are exposed. Figure-of-eight 2-0 Monocryl sutures approximate the levators. Over-tightening of the muscles can lead to dyspareunia. The superficial transverse perineal muscles and bulbocavernosus muscles are similarly approximated in both vaginoplasty and perineoplasty. The vaginal mucosa is closed with 3-0 running Vicryl, and the skin is closed with 5-0 chromic suture.

The patient's bladder is straight catheterized at the end of the case. Patients are instructed to take it easy for 2 weeks, during which they ice, elevate, and urinate in the shower or with a squirt bottle on the toilet. Tampons and intercourse are avoided for 6 to 8 weeks.

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REFERENCES

1. Dobbelaire JMLCL, Van Landuyt K, Monstrey SJ. Aesthetic surgery of the female genitalia. *Semin Plast Surg.* 2011;25:130–141.
2. Jamali S, Abedi P, Rasekh A, et al. The long term effect of elective colpoperineoplasty on sexual function in the reproductive aged women in Iran. *Int Sch Res Notices.* 2014:1–5. Available at <http://dx.doi.org/10.1155/2014/912786>. Accessed August 1, 2017.
3. Goodman MP. Female genital cosmetic and plastic surgery: a review. *J Sex Med.* 2011;8:1813–1825.
4. Ulubay M, Keskin U, Fidan U, et al. Safety, efficiency, and outcomes of perineoplasty: treatment of the sensation of the wide vagina. *Biomed Res Int.* 2016;2495105. Available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5005521/>. Accessed August 1, 2017.
5. Pelosi MA, III, Pelosi MA, II. Perineoplasty and vaginoplasty. In: Hamori CA, Banwell PE, Alinsod R, eds. *Female Cosmetic Genital Surgery: Concepts, Classification, and Techniques.* New York, N.Y.: Thieme Medical Publishers; 2017:162–180.