Surgery for Vulvar Vestibulitis Syndrome

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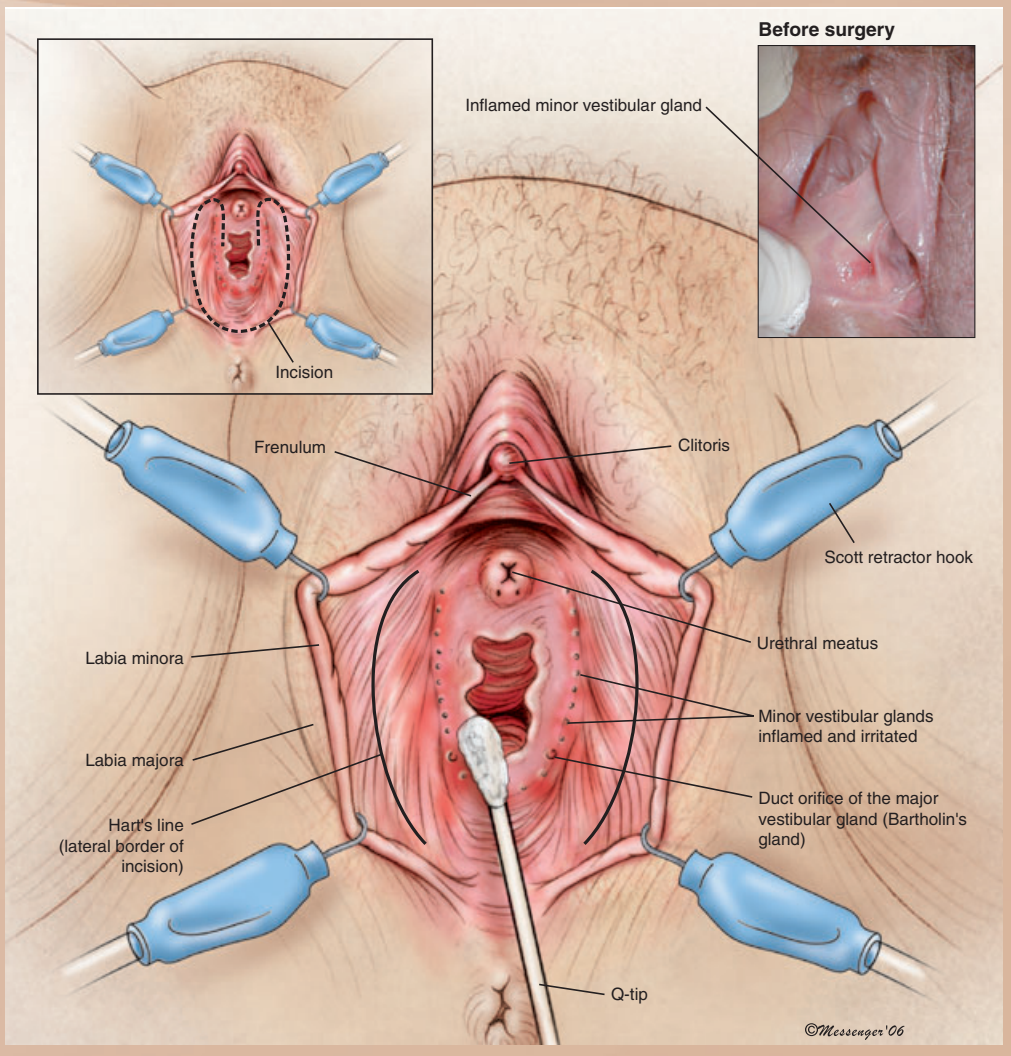

FIGURE 1

The vulvar vestibule is the area lying between the hymenal ring medially and Hart's line on the inner surface of the labia minora laterally. Hart's line is the junction of the keratinized skin and mucosa and can easily be visualized on the inner aspect of the labia minora. The labia minora are grasped with Allis clamps or other retracting hooks and separated laterally revealing the entire vulvar vestibule. The vulvar vestibule is then outlined using a marking pen. This is conducted by making parallel lines on either side of the urethra, carrying these lines superiorly to Hart's line then inferiorly following Hart lines meeting approximately 0.7 cm on the perineum. Marcaine 0.05% with epinephrine is used to infiltrate the vulvar vestibular mucosa for intraoperative hemostasis and postoperative pain control.

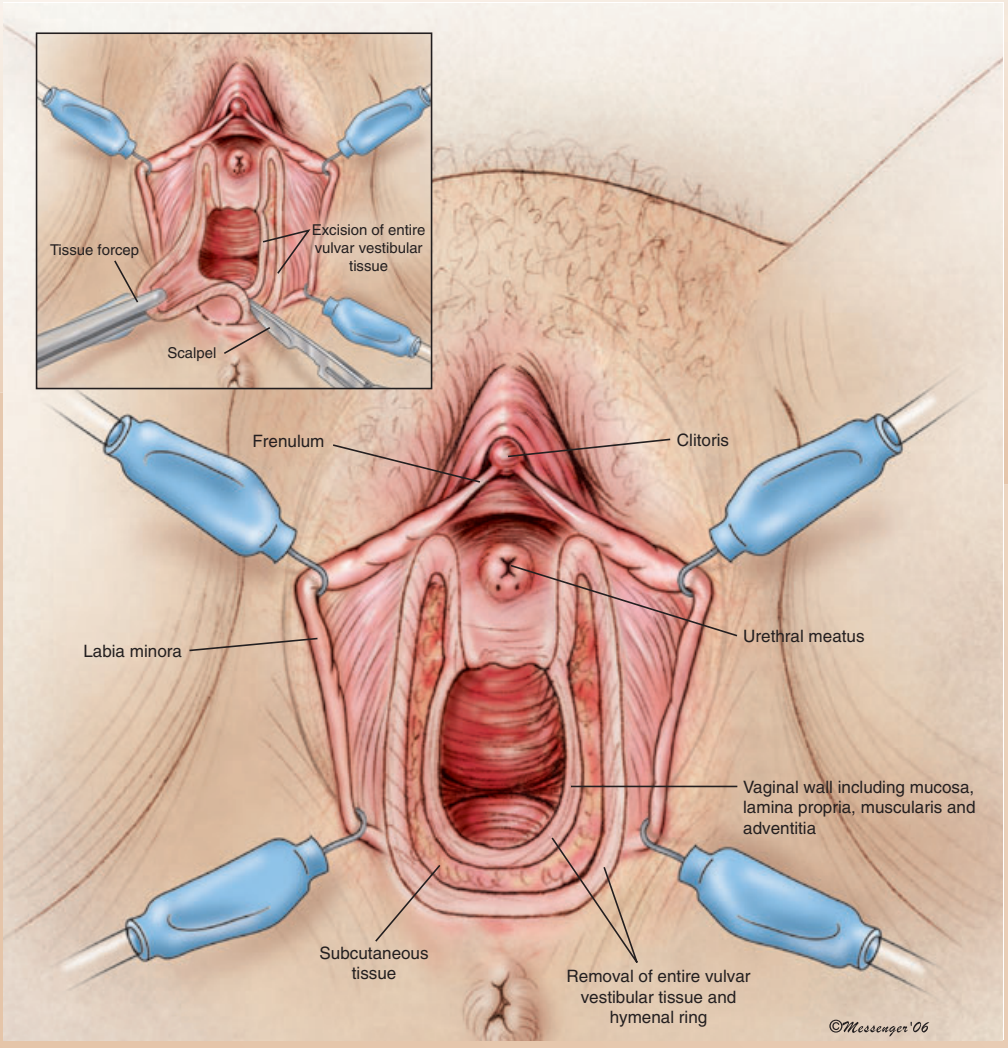

FIGURE 2

A scalpel is used to excise the entire vulvar vestibular mucosa approximately 3 mm deep and 5 mm past the hymenal ring, thus removing the entire hymenal ring. Other surgeons advocate excision of the Bartholin's glands; however, the author does not routinely do this as it increases intraoperative blood loss and postoperative pain.

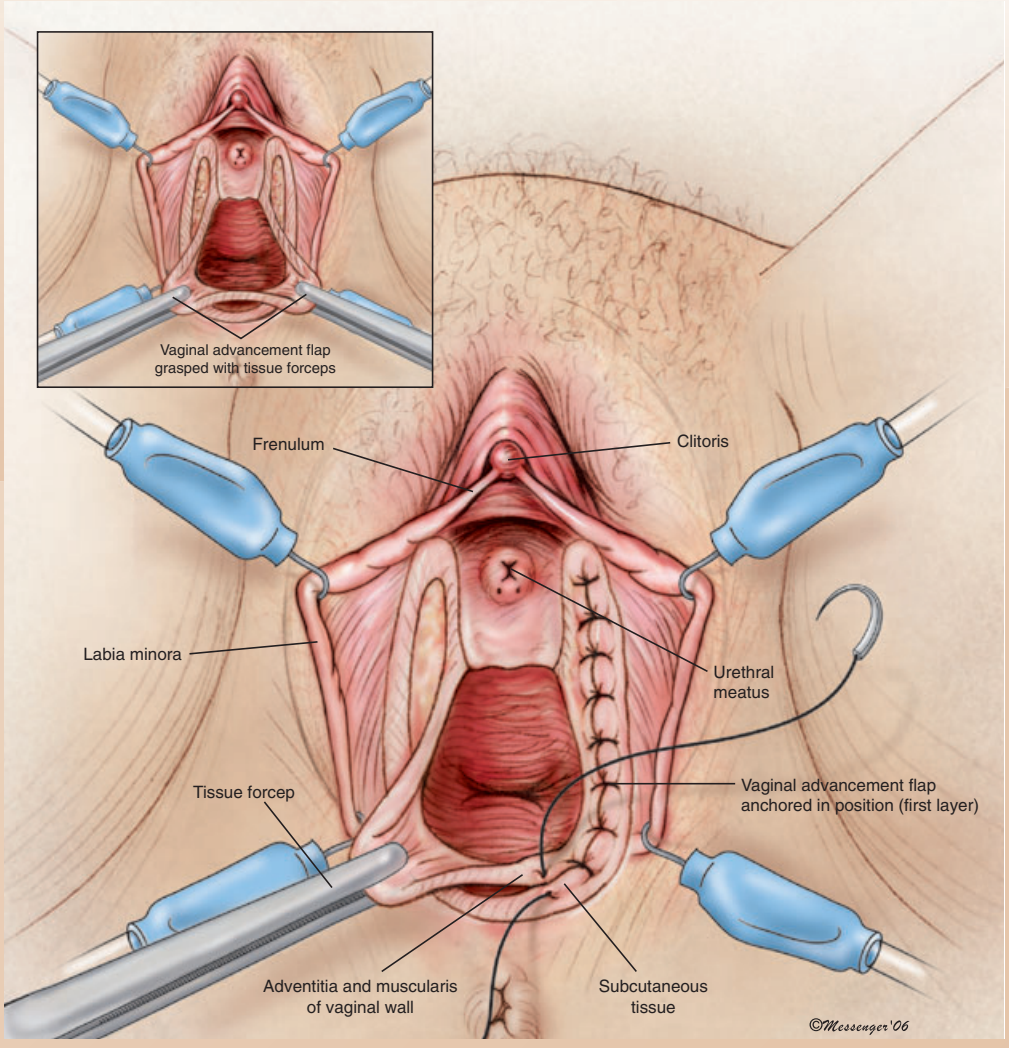

FIGURE 3

The vaginal mucosa is grasped with two Allis clamps or other tissue forceps. Then approximately 2 cm of vaginal mucosa is gently dissected off the recto-vaginal fascia to create a vaginal advancement flap. This advancement flap will be used to cover the defect in the posterior vestibule. Caution is advised as the rectum can be injured if the surgeon is not in the correct anatomic plane. After enough vaginal mucosa has been separated from the recto-vaginal fascia, it is anchored in an advanced position using two rows of multiple mattress sutures of 3-0 Vicryl (Ethicon, Somerville, NJ). The suture goes through the vaginal mucosa and is then "back-handed" through the recto-vaginal fascia and then goes back through the vaginal mucosa. When tying these stitches, an assistant applies gentle downward traction on the advancement flap to ensure that the mucosa will be secured in an advanced position. It is essential that these mattress stitches go through the recto-vaginal fascia in an anterior–posterior direction so that the vaginal diameter will not be compromised. The mattress sutures ensure that there will not be significant tension on the suture line when the advancement flap is approximated to the perineum. In addition, these mattress sutures prevent the advancement flap from curling and prevent postoperative hematoma.

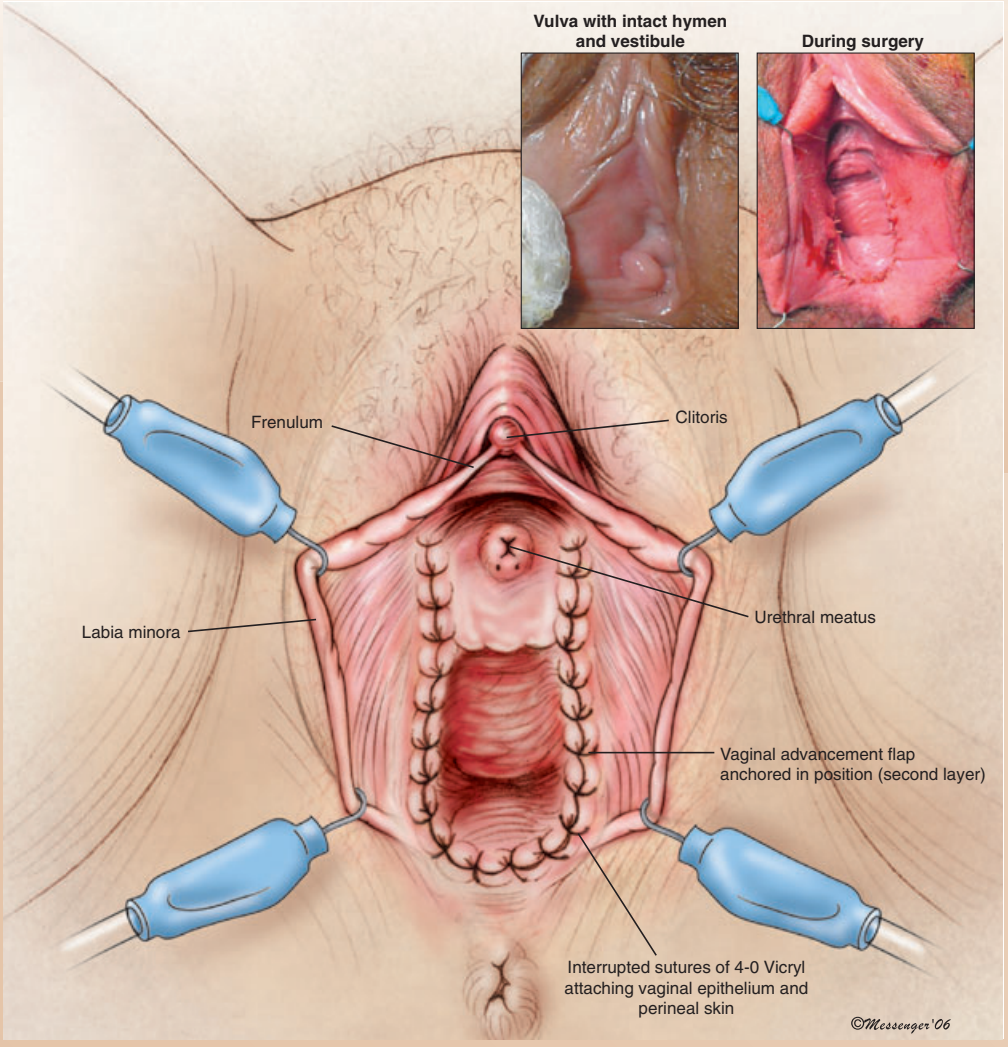

FIGURE 4

The defects in the anterior vestibule are closed with running interlocked 4-0 Vicryl suture. Meticulous attention to detail is used to ensure that the urethra is not injured when closing these defects and to prevent postoperative hematoma. The advancement flap is then approximated to the labia minora and perineum using approximately 20 interrupted stitches of 4-0 Vicryl suture to complete the procedure. After the procedure is completed, the urethra is catheterized to demonstrate that it was not compromised when closing the defects in the anterior vestibule. Lastly, a digital rectal examination is performed to confirm that the mattress stitches did not go through the rectum. Postoperatively, the patient uses ice packs for 48–72 hours to prevent postoperative edema. After approximately 6 weeks, the operative site should be completely healed. It is frequently necessary for the patient to work with physical therapy and use vaginal dilators nightly for 2–4 months before resuming intercourse.