REPAIR OF LARGE CYSTOCELE WITH RAZ SUSPENSION

17

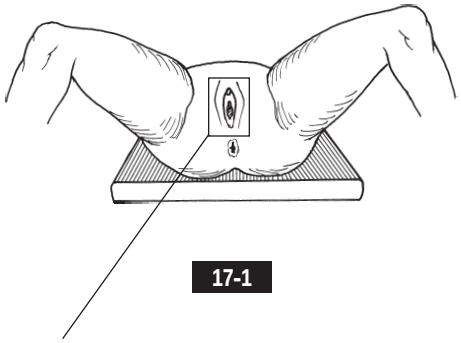
VAGINAL INCISION AND DISSECTION

Premarin cream application to the anterior vagina daily for 1 month before cystocele repair enriches the vasculature and thickens the vaginal epithelium, improving conditions for a favorable surgical outcome.

FIGS. 17-1 AND 17-2. After traction sutures have been placed on the labia majora, a weighted speculum is inserted for proper exposure of this area.

FIG. 17-3. With an Allis clamp applied just below the urethral meatus for traction, the surgeon injects saline solution from a point 2 cm below the meatus down the entire cystocele *(dashed line)*. The saline solution injections facilitate the dissection of the plane between the vaginal epithelium and the vesical tissues.

Allis clamps are applied at 2 cm intervals along the midline for traction *(triangles)*.



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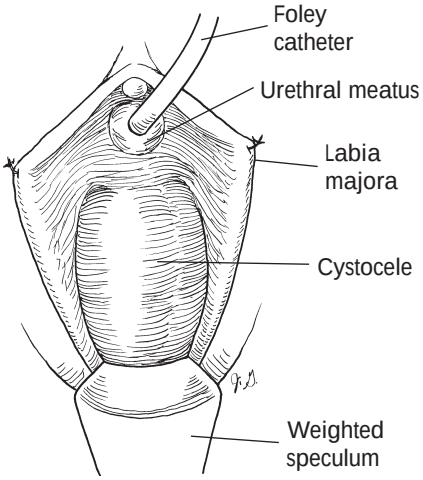

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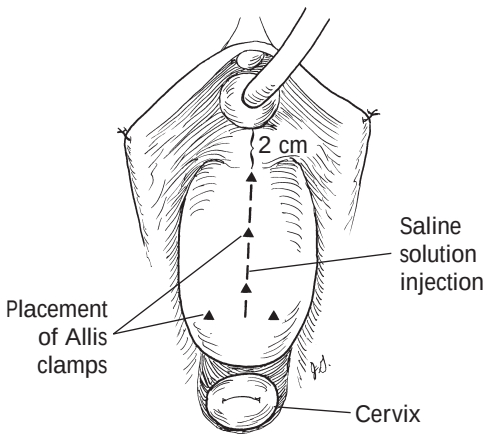

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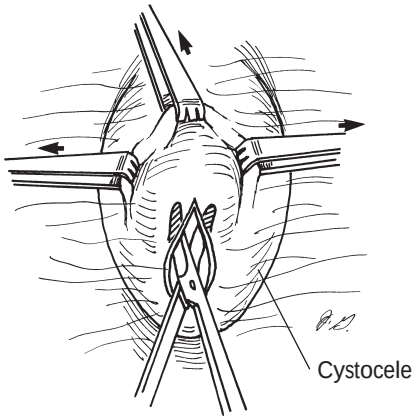
FIGS. 17-4, 17-5, AND 17-6. The dissection should begin in the middle of the cystocele and work toward the urethral meatus first, especially if a hysterectomy was previously performed. Often in this situation an enterocele lies posterior to the cystocele.

FIG. 17-7. After the initial incision and dissection with scissors, the surgeon can make a few gentle vertical strokes with the knife on the vaginal side to find the proper plane for the subsequent blunt dissection.

FIGS. 17-8 AND 17-9. Using an index finger with one layer of gauze over it, the surgeon can push against the vaginal wall and further separate the plane between the vaginal epithelial layers and the bladder.

FIG. 17-10. With cephalad blunt dissection, the surgeon can free the entire cystocele from the vaginal epithelium.

Cephalad and Lateral Traction to Ease Sharp Dissection



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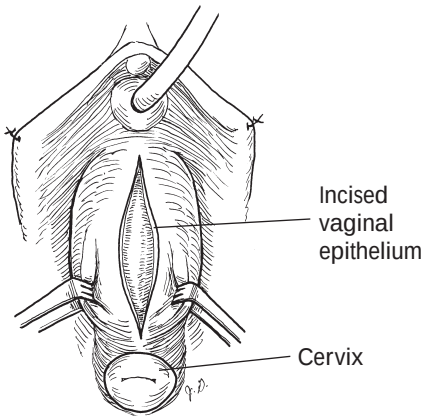

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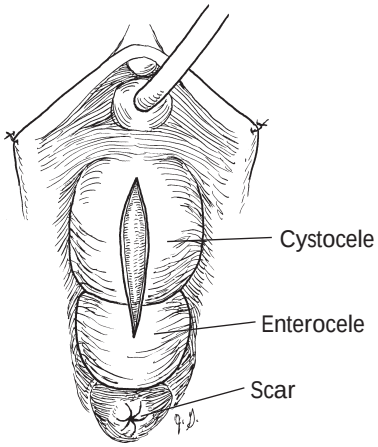
Common Posthysterectomy Configuration



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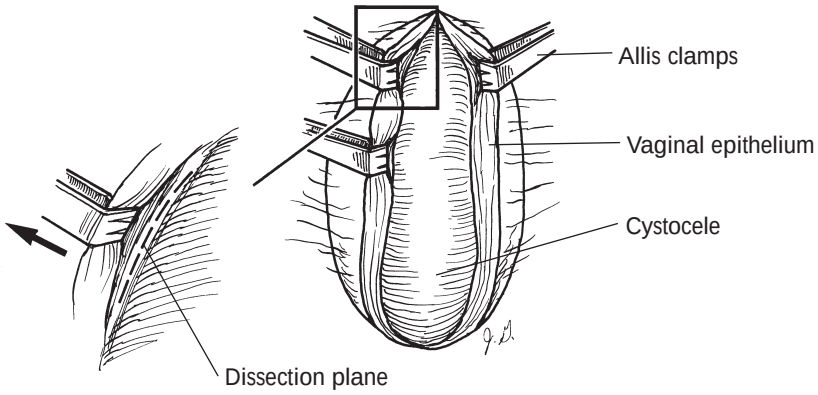

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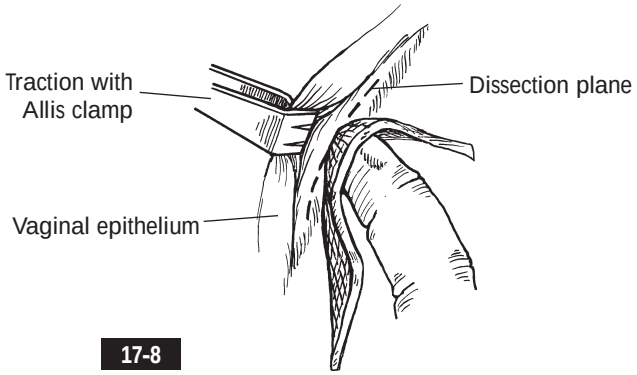
Finger/Sponge Maneuver for Blunt Dissection



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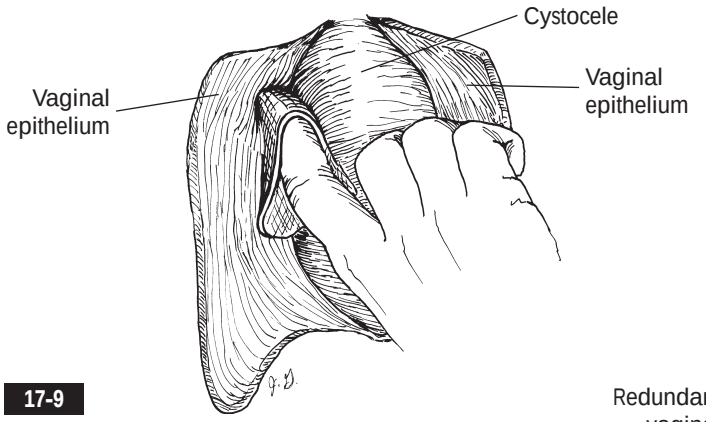
Completed Blunt Dissection



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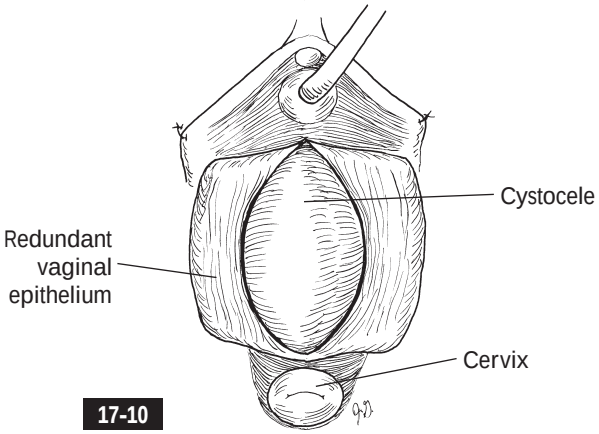


17-10

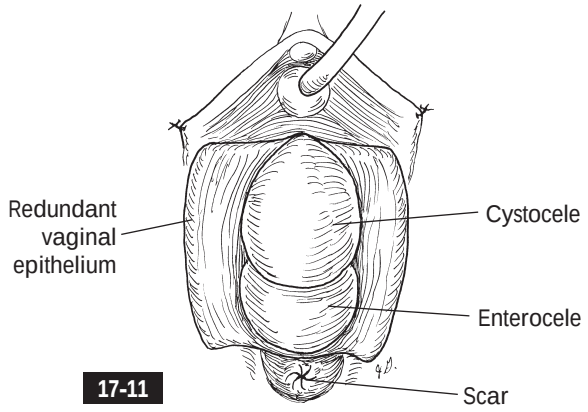
ASSOCIATED ENTEROCELE REPAIR

FIG. 17-11. Patients with a large cystocele and who have undergone hysterectomy often have an enterocele posteriorly.

As the dissection proceeds posteriorly, the surgeon will notice the enterocele, which is characterized by a more delicate prolapse of the peritoneal membrane.

It is often difficult to dissect the enterocele completely without penetrating the thin peritoneal membrane. However, reduction with a pursestring stitch (2-0 chromic) corrects the problem.

Common Posthysterectomy Configuration



17-11

ASSOCIATED STRESS INCONTINENCE REPAIR

FIG. 17-12. If the cystocele is associated with stress incontinence or if the patient is at risk for developing stress incontinence after cystocele repair, the surgeon should perform the Raz procedure at this point (see p. 139).

Using an index finger, the surgeon perforates the pelvic fascial complex. Helical stitches (1-0 Prolene) are then placed on both sides of the bladder neck, brought above, and anchored to the anterior rectus fascia.

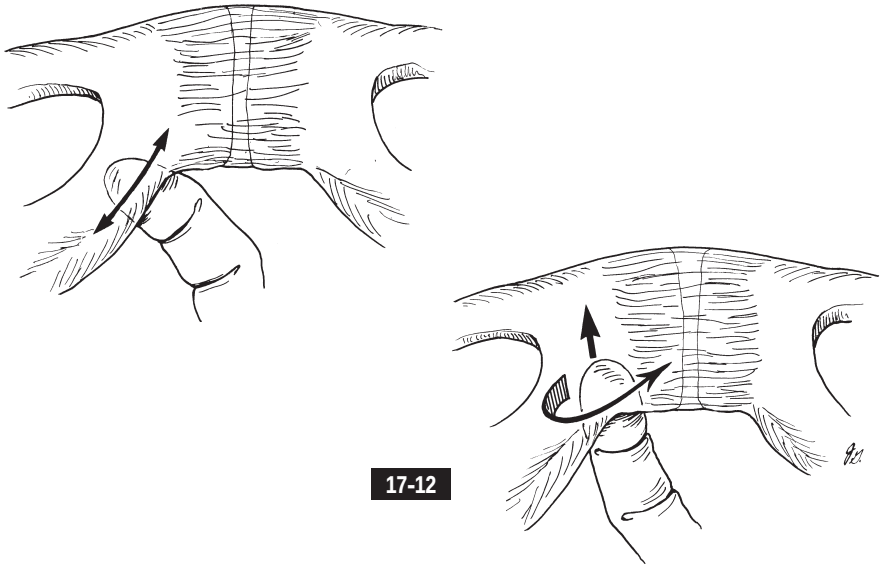
REDUCTION OF CYSTOCELE

FIG. 17-13. With adequate cephalad dissection on both sides of the cystocele, the surgeon should be able to separate the cystocele from all layers of the vaginal epithelium. Ideally this cephalad dissection will reveal the pubocervical fascia[1] or the levator ani muscle[2] on both sides of the cystocele.

FIG. 17-14. The pubocervical fascia is reapproximated.

FIGS. 17-15, 17-16, AND 17-17. At times, even with aggressive cephalad dissection, the pubocervical fascia cannot be identified or is too thin and friable for reapproximation. In these situations we have simply reapproximated all layers of the vaginal epithelium using mattress stitches (0 Vicryl) with excision of the redundant tissues. Our experiences show that full-thickness vaginal epithelium approximation alone is just as effective as reapproximating an extra layer of the pubocervical fascia.

Index Finger Maneuver After Perforation of Pelvic Fascial Complex (Urethropelvic Fascia)



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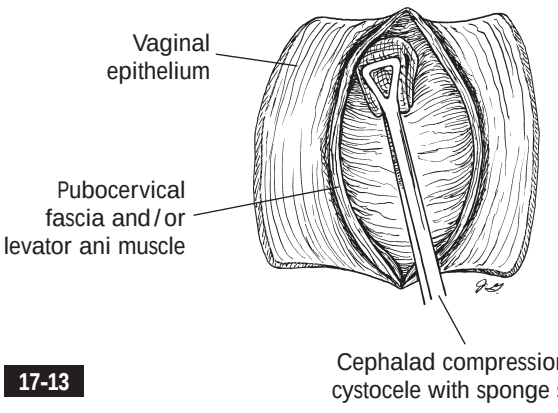

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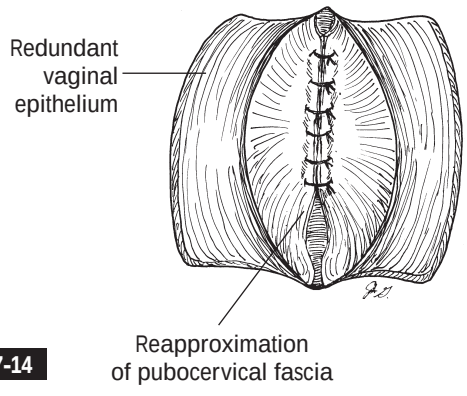

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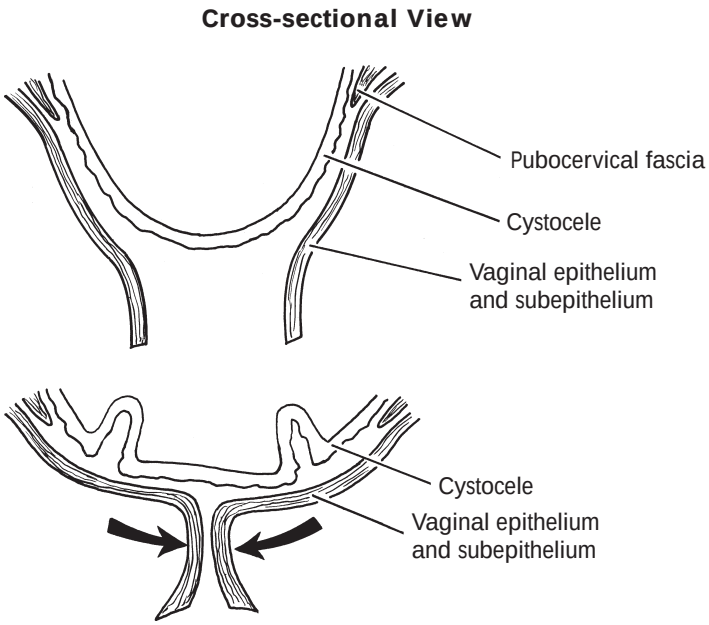

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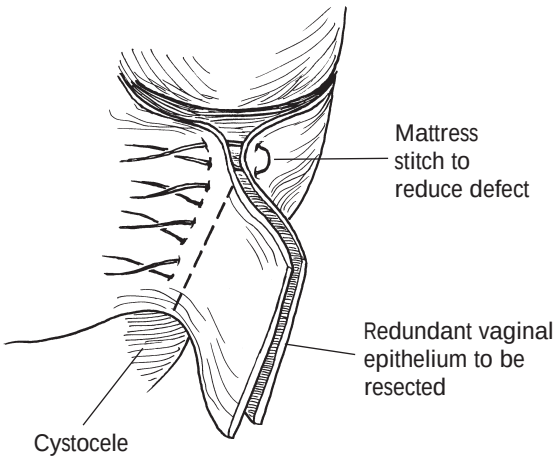

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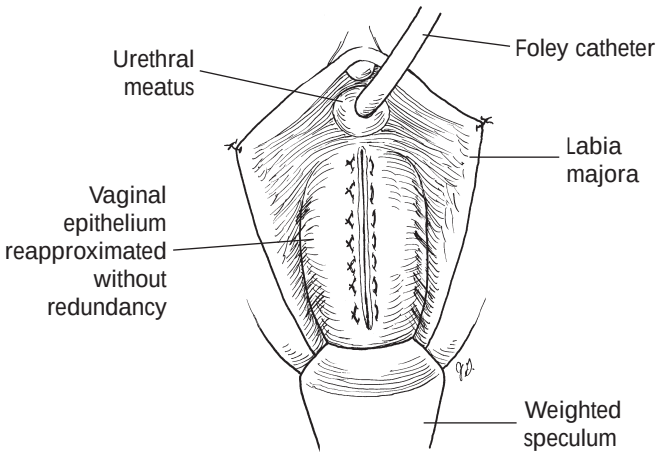

17-17

KEY POINTS

- Premarin cream is applied to the vaginal wall for 1 month before surgery.
- Saline solution is injected along the midline of the cystocele to separate the vaginal epithelium from the vesical tissues.
- A vertical incision is made starting in the middle of the cystocele and working anteriorly toward the urethral meatus rather than posteriorly. In patients who have had a hysterectomy, enteroceles often lie posteriorly.
- With a plain sponge over the index finger, the surgeon separates the entire cystocele from the vaginal epithelium.
- The Raz procedure is performed for correction of stress incontinence.
- The pubocervical fascia (levator ani muscle) is exposed bilaterally to the cystocele and is reapproximated.
- The vaginal epithelium and subepithelium are reapproximated and the redundant tissue is resected.

POTENTIAL PROBLEMS

- *Injury to bladder:* Close the bladder → place ureteral stent if needed
- *Difficulty locating pubocervical fascia:* Approximate the vaginal epithelium with mattress stitches and resect redundant tissues

REFERENCES

1 Raz S: *Atlas of transvaginal surgery*, Philadelphia, 1992, WB Saunders.

2 Leach GE: Vaginal anatomy and preoperative preparation for vaginal surgery, *Urol Clin North Am* 2(1):1, 1994.