

# Site-Specific Colpocleisis Called Superior Approach

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ST. LOUIS — A unique approach to colpocleisis has been developed that incorporates vaginal repair of paravaginal defects, apposition of the pubocervical and rectovaginal septa, and minimal anatomical distortion.

"There is a place for this in your practice, and it is not hopelessly complicated," Carl W. Zimmerman, M.D., said at the 14th International Pelvic Reconstructive and Vaginal Surgery Conference.

"We're relying on native endopelvic connective tissue to close the urogenital hiatus, which is unique in colpocleisis techniques," said Dr. Zimmerman, professor of obstetrics and gynecology at Vanderbilt University, Nashville, Tenn.

The use of colpocleisis to correct advanced prolapse is certainly not for every woman, he stressed, since it permanently closes the vagina and therefore prevents coitus.



This photo shows a patient with advanced pelvic organ prolapse.

"This operation is not an option for the 11% of women with primary pelvic floor defects, or even for the 30% of patients who need a second corrective surgery. This is for the small percentage of physically active and relatively healthy individuals who have multiple recurrences or massive prolapse profoundly eroding their quality of life," he said at the conference, sponsored by the Society of Pelvic Reconstructive Surgeons and Emory University.



This image shows the same patient after undergoing site-specific colpocleisis.

Traditional colpocleisis closes the urogenital hiatus without specifically identifying the perivaginal endopelvic fascial septa, while using some degree of vaginectomy. This class of operation historically has been associated with failure because of the advanced degree of prolapse in the patients selected and the nonspecific operative technique, he added.

But Dr. Zimmerman has had no failures during 3 years of follow-up in the 15 pa-

tients he's treated using his site-specific technique.

"The unique part of this operation is that in other colpocleisis techniques the anterior and posterior vaginal walls are sutured together in a variety of ways, but there's no specific attempt to identify the fascial breaks and use those as a closure mechanism for the colpocleisis procedure," he told this newspaper. This traditional approach results in a significant degree of anatomical distortion, which weakens the closure, Dr. Zimmerman explained.

With his site-specific technique, he said, "DeLancey level II lateral attachment is restored in the same way that it would be for a reconstruction, and the edges of the pubocervical and rectovaginal septa are then sutured together with permanent sutures. This technique occludes the urogenital hiatus in a site-specific fashion and eliminates vaginal depth. However, in the process, there is minimal anatomical disruption and maximal strength in the repair." ■

## Newer Transobturator Sling Technique Said to Be Safer

ST. LOUIS — Placing a transobturator sling with a newer technique that starts inside the paraurethral space and progresses outward is both safer and more effective than the "outside-to-in" approach, according to Robert M. Rogers Jr., M.D., an expert in vaginal surgery.

Transobturator (TOT) slings are most commonly threaded through a skin incision in the pelvis and pulled through to the paravaginal space (the outside-to-in approach). This traditional approach poses the risk of bladder and urethra perforation and laceration of the anterior branch of the obturator artery, he explained at the 14th International Pelvic Reconstructive and Vaginal Surgery Conference.

In contrast, the "inside-to-out" approach begins laterally, away from the bladder and urethra, and twists helical-shaped passers away from the danger zones, said Dr. Rogers of Reading Hospital and Medical Center in West Reading, Pa.

"When you put the helical passers through and you drop the handle vertically into the perineum as you rotate, the engineering of the device keeps you out of trouble," Dr. Rogers, a consultant and speaker for Gynecare, which makes the passers, said in an interview.

The outside-to-in approach involves a directional force toward the bladder and urethra. To protect these structures, the surgeon must dissect the adjacent paraurethral and paravaginal areas to place a finger to meet the instrument as it passes through the obturator internus muscle.

"That large paraurethral dissection can allow the tape to slip back up to the bladder neck or urethrovesical junction, and there's also a question in my mind about how much innervation to the bladder is disrupted by the large finger dissection," he said in an interview.

The narrow paraurethral incision made in the inside-to-out approach ensures that the tape stays where it is placed—at the midurethra—without slipping back to the bladder neck.

Because of the decreased risk to the bladder and urethra with the inside-to-out approach, intraoperative cystoscopy is not necessary, whereas it must be a consideration when using the outside-to-in technique, he said.

The anterior branch of the obturator artery, which runs along the exterior edge of the obturator foramen, is the structure of most concern. "I've done studies in about 35 cadavers, and in about 60% of them we found an anterior branch of the obturator artery and vein, which traveled along the outer bony rim of the obturator foramen. Theoretically, on the outside-to-in approach, if you hit the edge of the foramen and then scrape down to get through the membrane, you could lacerate those vessels, and there have been external obturator groin hematomas reported with this," he said.

The inside-to-out technique is unlikely to pose this problem, since from this angle the artery is shielded by the rim of the obturator foramen. ■



**Intraoperative cystoscopy is not necessary with the inside-to-out approach.**

DR. ROGERS

## Preventing Infections Associated With Pelvic Sling Placement

ST. LOUIS — Infections associated with pelvic sling placement can be prevented with presurgical screening and treatment of skin and vaginal infections, according to Sebastian Faro, M.D.

Cystitis is the most common infection reported in the literature in association with transvaginal tape (TVT) placement. Superficial skin infections also have been reported, as well as abscesses in the periurethral space and the labia majora. In addition, there have been two case reports of necrotizing fasciitis after TVT placement, he said at the 14th International Pelvic Reconstructive and Vaginal Surgery Conference.

The risk factors associated with the placement of TVT, as well as transobturator slings (TOS), include placement of a foreign body; bacterial entrance to deep tissues during and after the procedure via incisions in both the skin and the anterior vaginal wall; the close proximity of the rectum, which can result in fecal flora such as bacteroides, enterococcus, and *Escherichia coli*, contaminating the vagina; bacterial colonization of the sling; and collection of blood and serum, which can encourage abscess formation, said Dr. Faro of the University of Texas, Houston.

In a review of his experience with 37 TVT cases and 12 TOS cases during the course of 1 year, he reported no infections in the TOS patients and 2 cases each of cystitis and pelvic cellulitis in the TVT patients.

Dr. Faro recommended screening all

sling patients for bacterial vaginosis (BV) 2 weeks before surgery and treating them with vaginal metronidazole or clindamycin if they are positive. He also recommended a urinalysis and culture at the same time, and, if necessary, treatment with 100-mg nitrofurantoin twice daily for 7 days.

"I also screen for nasal carriage of *Staphylococcus aureus*, and if [the screenings] are positive, I start treatment 3 days before the procedure," he said at the meeting, which was sponsored by the Society of Pelvic Reconstructive Surgeons and Emory University.

Nasal treatment is with 2% mupirocin calcium ointment 0.5 g in each nares twice daily for 5 days.

For patients undergoing a sling procedure alone—without hysterectomy or pelvic repair procedures—antibiotic prophylaxis on the day of surgery is not necessary, he said. Otherwise, checking the color and smell of vaginal discharge when the patient is in the operating room can be very valuable.

"If the discharge is dirty gray with a fishy or foul odor, suspect BV," Dr. Faro said, recommending one 500-mg dose of metronidazole and one 500-mg dose of levofloxacin intravenously. A creamy or green discharge with no odor could be group B streptococcus or *E. coli*, he said, recommending one 2-g dose of cefazolin or one 500-mg dose of levofloxacin intravenously. These treatments should be started within the hour after the start of surgery. ■



**Start treatment for nasal carriage of *Staphylococcus aureus* 3 days before the procedure.**

DR. FARO