

# Kit-Specific Training Is Required for Mesh Kits

*Appropriate training needed for good outcome for anterior compartment prolapse surgical treatment.*

BY SHARON WORCESTER

EXPERT ANALYSIS FROM AN INTERNATIONAL PELVIC RECONSTRUCTIVE AND VAGINAL SURGERY CONFERENCE

ST. LOUIS – Mesh kits aren't a one-size-fits-all option when it comes to the treatment of anterior compartment prolapse.

A number of kits are available, and unlike many other aspects of surgery in which one product or tool might be relatively equivalent to another, that's not the case when it comes to mesh kits, Dr. Peter M. Lotze said at the conference.

Although the kits all have a shared goal

of creating a tension-free environment, they are anchored at different points. The right choice – and the right training – is important for a good outcome.

Dr. Lotze of the department of obstetrics and gynecology at the University of Texas, Houston, who is a practicing urogynecologist, described some of the most frequently used kits in the United States.

The Perigee Prolapse Repair System (American Medical Systems), the Gynecare Prolift Total, Anterior and Posterior Pelvic Floor Repair System (Ethicon), and the Avaulta Plus Biosynthetic Support System – Anterior (Bard

Urological) all use a transobturator approach and use the ileococcygeus muscle and the internal obturator muscles as their anchor points, he said. These kits are designed to hold up a cystocele.

The Pinnacle Pelvic Floor Repair Kit and Uphold Vaginal Support System (both from Boston Scientific) and the Elevate Apical and Posterior Prolapse Repair System (American Medical Systems) use an anterior compartment approach, and use the sacrospinous ligament as their principal anchor of support, he said. These kits provide apical support in addition to correcting a cystocele.

The Gynecare Proxima Pelvic Floor Repair System (Ethicon) is the newest kit on the market, and via anterior compartment dissection to the ischial spines, it is placed up against the arcus tendineus fascia pelvis rather than anchoring into it. This kit is marketed for use in stage 1 prolapse, Dr. Lotze said.

Although a prospective observational study that he and his colleagues have submitted for publication suggests that fixation at the sacrospinous ligament is best for patients with a cystocele as well as apical prolapse – because it provides better apical support (see sidebar) – data are generally limited in regard to outcomes with these kits. This is true particularly because most reported cases involved combined repairs, making the findings difficult to interpret. However, existing data do suggest some benefit, and the kits do offer a minimally invasive vaginal approach that can be performed in an outpatient setting, Dr. Lotze said, noting that durability and patient satisfaction need further evaluation in future studies.

In the meantime, one important way to avoid complications is to pay careful attention to mesh tensioning. While the kits are technically considered “tension-free,” there is no such thing when a woman is standing up. The bladder, bowel, and vagina all rest on the mesh, creating tension. If you think it's too loose – you probably did it right, Dr. Lotze said.

Conversely, if you think it's a perfect result, your patient will likely be back to have the mesh cut out, because it will contract and cause pain, he said.

Know the anatomy, understand the success of classical surgery, know when to augment, and get training, training, and more training, he advised.

“You've got to be trained on your mesh kits,” he said, adding that a “weekend warrior” training course may not be sufficient.

Too often, physicians spoiled by quick and easy sling training sessions insist on pared-down weekend mesh kit training sessions to accommodate their social schedules – or vendors offer such limited training to entice participation. This is the biggest mistake physicians and vendors make, and that cycle needs to be broken, Dr. Lotze said.

In fact, even a full Saturday course may be insufficient, he said, noting that it's unrealistic to think you'll be proficient without additional training. There's nothing to lose by coming back to the next cadaver course.

“Go as many times as it takes. Vendors are happy to send you back – they know you're a long-term investment, so invest in your patients and go back if you need to,” he said.

Dr. Lotze disclosed that he is a speaker and researcher for Boston Scientific. ■

## Use Sacrospinous Ligament Fixation

Apical support is best achieved by using sacrospinous ligament fixation rather than prespinous fixation when using mesh for the treatment of prolapse.

In a prospective observational study of 100 patients, Dr. Lotze and his colleagues found that on average, vaginal length was between 9.0 and 9.3 cm, and length from the introitus to the level of the ischial spine was about 7.5 cm – a difference of about 1 finger breadth.

Fixation of mesh at the sacrospinous ligament will provide support for about 80% of the total vaginal length; fixation at a level 1 finger breadth below that will provide support for only 58% of the to-

tal vaginal length, Dr. Lotze said.

Therefore, using prespinous fixation means that about a third of the apex will not be supported, and in patients with both cystocele and apical prolapse, this approach is more likely to fail.

Testing this in a cadaver lab to see how high they could get with the mesh kits in total vaginal length, Dr. Lotze and his colleagues found that with sacrospinous kits they were able to get to 100% of the total vaginal length, compared with only 60% of total vaginal length using prespinous kits, in most cases.

“So again, this emphasizes that the prespinous kits may not cut it if you have apical prolapse,” he said.

# Technique Aids Success With Anterior Vaginal Prolapse Repair

BY SHARON WORCESTER

EXPERT ANALYSIS FROM AN INTERNATIONAL PELVIC RECONSTRUCTIVE AND VAGINAL SURGERY CONFERENCE

ST. LOUIS – A new surgical approach that addresses the anatomical cause of anterior vaginal wall prolapse has much higher success rates than do standard midline and paravaginal repairs that simply reduce the bulge, preliminary results in more than 500 patients suggest.

Success rates with the new procedure, which involves transverse defect repair, have been 91%-95% based on preliminary reports, compared with 40%-60% with traditional colporrhaphy – and even less when the complications associated with the increasing use of synthetic mesh come into play, Dr. S. Robert Kovac reported at the conference, which was sponsored by the Society of Pelvic Reconstructive Surgeons.

The findings regarding the new technique, which have been submitted for publication, need to be confirmed in additional studies. However, it appears that the approach, which does not require plication, trocars, or synthetic mesh, is quite promising for improving outcomes, Dr. Kovac said, adding that the key to successful treatment is finding the cause of the problem, understanding it, and treating it correctly.

“It's not the material you use, it's the technique you use,” he said.

In one study of 276 patients who had undergone multiple surgeries for repair and 122 patients undergoing primary repair, success rates using the new transverse repair technique were 91% at 12 months in 150 patients whose surgery involved sutures only, and 92% at 12 months in the remaining patients who were treated with Surgisis Biodesign (Cook Medical Inc.), said Dr. Kovac, the John D. Thompson Distinguished Professor of Gynecologic Surgery and director of the center for pelvic reconstructive surgery and urogynecology at Emory University, Atlanta.

The success rate was greater than 95% in a separate study involving 122 patients with stage III or IV prolapse who underwent primary repair using Surgisis Biodesign and were followed for 12 months, Dr. Kovac said.

The new transverse defect repair technique involves reattaching the pubocervical fascia to the pericervical ring to correct the transverse defect. This is followed by providing apical support to the ilioococcygeal fascia and then to the retroperitoneal uterosacral ligaments at the level of their insertion at S2-S3.

The theory behind this approach to anterior vaginal wall prolapse is based on anatomical childbirth studies

**VITALS Major Finding:** In one study of 276 patients who had undergone multiple surgeries for repair and 122 patients undergoing primary repair, success rates using the new transverse repair technique were 91% at 12 months in 150 patients whose surgery involved sutures only, and 92% at 12 months in the remaining patients who were treated with Surgisis Biodesign biologic mesh.

**Data Source:** Preliminary studies of more than 500 patients.

**Disclosures:** Dr. Kovac disclosed that the department of gynecology and obstetrics at Emory University, Atlanta, is paid by Cook Medical for teaching activities he performs regarding Surgisis Biodesign for cystocele repair.

that provide “very, very strong evidence” demonstrating that transverse defects, and not midline or paravaginal defects, are the cause of cystocele, he explained.

The reason failure rates are so high with traditional colporrhaphy is because the source of the problem is not treated, Dr. Kovac said.

He noted that despite consistently poor results, 80% of gynecologists are still using “this 100-year-old technique.” ■