

# Mesh Beats Xenograft Repair of Anterior Prolapse

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HOLLYWOOD, FLA. — Paravaginal repair of anterior prolapse with synthetic mesh is associated with a higher anatomic success rate than is xenograft repair; both of these interventions were more successful than standard colporrhaphy, based on interim results of a double-blind, randomized controlled study.

There were no significant differences in symptomatic prolapse recurrence, operative time, or sexual function outcomes, Dr. Keisha Dyer said.

Recurrence rates of up to 40%-50% are often reported after anterior vaginal wall prolapse repair, with about 30% of these women requiring a reoperation, she said.

Although paravaginal repairs and graft augmentation can decrease the number of failures, more good data are needed about the optimal material, said Dr. Dyer of the division of female pelvic medicine and reconstructive surgery at the

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**Major Finding:** Paravaginal repair of anterior prolapse with synthetic mesh was associated with a higher anatomic success rate than was xenograft repair, both of which beat standard colporrhaphy at 1 year after surgery.

**Data Source:** Interim results of a double-blind, randomized controlled study in 78 women with symptomatic prolapse.

**Disclosures:** The study was supported by an unrestricted grant from Boston Scientific Corp. Dr. Dyer and her coauthors said they had no relevant disclosures.

University of California, San Diego.

Dr. Dyer and her associates assessed 99 women with symptomatic prolapse. In the operating room on the day of surgery, 32 were randomized to anterior colporrhaphy; another 31, to porcine dermal graft; and the remaining 36, to polypropylene mesh.

At baseline, patients enrolled in this Optimal Anterior Repair Study (OARS) had a

mean of stage III anterior prolapse and a mean age of 63 years. They were enrolled from January 2006 to September 2008.

Dr. Dyer presented interim results for 78 women followed for at least 1 year (mean, 20 months) at the annual meeting of the American Urogynecologic Society.

Anatomic success was achieved by 14 of 26 women (54%) in the colporrhaphy group, 15 of 24 women (63%) in the porcine graft group, and 25 of 28 (89%) women in the synthetic mesh group. The

difference in this primary outcome between the colporrhaphy and synthetic mesh groups was statistically significant, Dr. Dyer said. Anatomic success was defined as prolapse stage I or 0 on the Pelvic Organ Prolapse Quantification (POP-Q) examination.

There was no significant difference between groups in symptomatic recurrence, a secondary aim of the study. A to-

tal of 12% of the colporrhaphy group, 13% of the porcine graft group, and 4% of the mesh group had a return of prolapse symptoms, such as complaint of "bulge." Two women had reoperations for symptomatic recurrence, both patients in the porcine graft group.

The erosion rate was higher in the synthetic mesh group. This outcome was experienced by four patients in this group (14%) compared with one patient (4%) who received the porcine graft repair.

There were no significant differences in terms of operative time. However, there was a trend toward approximately 50-mL more blood loss with augmentation, Dr. Dyer said. Estimated blood loss was 171 mL in the colporrhaphy cohort, 229 mL in the porcine graft group, and 225 mL in the synthetic mesh patients.

Postoperative sexual function scores on the Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ) were not significantly different between groups. ■

## Prolapse Surgery Now Less Common in Women Under 52

HOLLYWOOD, FLA. — The overall number of inpatient surgeries for pelvic organ prolapse decreased over the past few decades, with some interesting trends according to patient age, based on a 1979-2006 study of the National Hospital Discharge Survey database.

"The decrease in overall numbers likely reflects a large decline in procedures in women younger than 52 years," according to Dr. Keisha Jones. "Rates were stable or slightly increased for women 52 and older."

Epidemiological data for pelvic organ prolapse are lacking, she said at the annual meeting of the American Urogynecologic

During the study, mean patient age increased by a decade from 47 years in 1979 to 57 years in 2006, said Dr. Jones, who was an ob.gyn. fellow in the division of female pelvic medicine and reconstructive surgery at Magee-Women's Hospital in Pittsburgh at the time of the study. Dr. Jones is currently a urogynecologist at Baystate Medical Center in Springfield, Mass.

They also looked at age-adjusted surgery rates based on 1990 U.S. census data. The overall rates of prolapse surgery decreased from 2.93/1,000 women in 1979 to 1.56 in 2006. Among younger women, the rate decreased from 3.03 in 1979 to 0.84 in 2006.

Among women 52 and older, the rates actually increased slightly, from 2.73 in 1979 to 2.86 in 2006.

They proposed that a dramatic decrease in overall hysterectomies performed for benign indications among women younger than 52 is directly related to the significant decrease in inpatient prolapse procedures in this population.

The overall age-adjusted rates of hysterectomy for benign indications declined from 7.24/1,000 women in 1979 to 4.50 in 2006,

most dramatically in women under 52, (from 9.4/1,000 women to 5.1), Dr. Jones said. In contrast, no significant change was observed for hysterectomies in women 52 years and older (from 3.1 in 1979 to 3.3 in 2006).

A total of 35% of women had one or more comorbidities at the time of surgery; oncologic, cardiovascular, and endocrine conditions were the most common. In addition, 29% of women had surgical complications, most often uterine/vaginal inflammation and anemia. ■

## Transvaginal Mesh Placement For Prolapse: QOL Improved

HOLLYWOOD, FLA. — Significant improvements in quality of life and sexual health measures were reported 1 year after women underwent transvaginal mesh placement for prolapse in a retrospective study.

Clinicians reported an 87% cure rate among the 99 women compared with baseline, based on a score of 2 or less on the Pelvic Organ Prolapse Quantification (POP-Q) examination.

Dr. Stephanie Molden, an ob.gyn. in Allentown, Pa., and her associates found significant subjective improvements in quality of life (QOL) and sexual health at 1 year compared with baseline on multiple measures, including the Pelvic Floor Distress Inventory-20 (PFDI-20), the Pelvic Floor Impact Questionnaire-Short Form 7 (PFIQ-7), and the Organ Prolapse/Urinary Incontinence Sexual Questionnaire-12 (PISQ-12).

There were significant increases in all components of the PFDI-20 and the PFIQ-7, regardless of which vaginal compartment was treated.

"Interestingly, we did not see any statistically significant shortening of the vaginal length like in previous studies," said Dr. Miles Murphy, a study coauthor who presented the findings at the annual meeting of the American Urogynecologic Society.

Each participant had pelvic reconstruction using transvaginal mesh (Gynecare ProLift plus M system, Ethicon Inc.).

At follow-up, 87 of the 99 patients had completed the PFDI-20 and the PFIQ-7, 73 had POP-Q examinations, and 22 had completed the PISQ-12.

"There were significant improvements in quality of life and anatomic parameters," said Dr. Murphy, also an ob.gyn. in Allentown.

For example, mean PFDI-20 scores at baseline were 79 vs. 26 at follow-up 1 year later. Mean PFIQ-7 scores were 64 at baseline and decreased to 12 at 1 year. Both of these instruments are scored 0 (best) to 300 (worst). In ad-

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**Major Finding:** Quality of life and sexual health measures significantly improved in women who underwent transvaginal mesh placement for prolapse.

**Data Source:** A retrospective study of 99 women.

**Disclosures:** None reported.

dition, PISQ-12 scores increased from a mean of 84 at baseline to 94 at follow-up. The PISQ-12 is scored from 0 (worst) to 124 (best).

"No erosions were seen over this 1 year," he said in response to a meeting attendee's question.

Another meeting attendee asked if other factors might have also improved outcomes and confounded the data.

"These procedures are obviously not the only factor," Dr. Murphy replied. For example, a patient may have had a posterior repair done at the same time as anterior mesh placement.

"The point is these are the types of procedures we are doing, so this reflects reality."

Dr. Murphy added, "Prospective, randomized trials are still needed." ■

## VITALS

**Major Finding:** There was a drop in pelvic organ prolapse procedures from approximately 228,000 procedures performed in 1979 to 186,000 in 2006. This appears to be largely due to a decrease in procedures performed in women under age 52 years.

**Data Source:** A study of the National Hospital Discharge Survey database from 1979 to 2006.

**Disclosures:** The National Institutes of Health funded the study. Dr. Jones said she had no relevant disclosures.

Society. So she and her associates evaluated more than 5.6 million prolapse procedures performed from 1979 to 2006. There were approximately 228,000 procedures in 1979 and 186,000 in the final year of the study period, according to ICD-9-CM codes in the database.

The researchers stratified women into two groups—those younger than 52 and those 52 years and older. They chose this cutoff point because 52 is the average age of onset of menopause in the United States.