What Happens to the Posterior Compartment and Bowel Symptoms After Sacrocolpopexy?: Evaluation of 5-Year Outcomes From E-CARE

Cara L. Grimes, Emily S. Lukacz, Marie G. Gantz, Lauren Klein Warren, Linda Brubaker, Halina M. Zyczynski, Holly E. Richter, John Eric Jelovsek, Geoffrey Cundiff, Paul Fine, Anthony G. Visco, Min Zhang, and Susan Meikle, for the NICHD Pelvic Floor Disorders Network

Department of Obstetrics and Gynecology, Columbia University Medical Center, New York, NY (C.L.G.); Department of Reproductive Medicine, UC San Diego Health Systems, San Diego, CA (E.S.L.); RTI International, Research Triangle Park, NC (M.G.G., L.K.W.); Departments of Obstetrics & Gynecology and Urology, Stritch School of Medicine, Loyola University, Chicago, IL (L.B.); Department of Obstetrics, Gynecology, and Reproductive Sciences, University of Pittsburgh, Pittsburgh, PA (H.M.Z.); Department of Obstetrics and Gynecology, University of Alabama at Birmingham, Birmingham, AL (J.E.J.); Obstetrics, Gynecology, & Women’s Health Institute, Cleveland Clinic, Cleveland, OH (M.Z.); Department of Obstetrics & Gynaecology, University of British Columbia, Vancouver, Canada (A.G.V.); Department of Obstetrics and Gynecology, Baylor College of Medicine, Houston, TX (P.F.); Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, NC (A.G.V.); Department of Biostatistics, University of Michigan, Ann Arbor, MI (M.Z.); and The Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD (S.M.)

Female Pelvic Med Reconstr Surg 2014;20:261–266

ABSTRACT

Posterior pelvic organ prolapse (pPOP) commonly occurs with apical prolapse, other vaginal compartment defects, and symptoms of defecatory dysfunction including obstructed defecation (OD). The indication for concomitant posterior repair (PR) during apical prolapse repair may be based on the presence or absence of symptoms. Some surgeons do not perform PR during repair of apical prolapse in the absence of symptoms. The Extended Colpopexy and Urinary Reduction Efforts (E-CARE) trial assessed the progression of posterior compartment prolapse and symptoms of OD after open abdominal sacrocolpopexy (ASC). Data from that study have been published in the primary article (Nygaard, JAMA 2013;309:2016).

This secondary analysis of E-CARE data assessed the occurrence of pPOP and symptoms of OD in patients 5 years after open ASC. The study was designed to determine whether PR is necessary at the time of ASC. Participants with baseline and 5-year outcome data were divided into 3 groups using baseline posterior Pelvic Organ Prolapse Quantification points and concomitant PR: (1) no PR, Ap < 0; (2) no PR, Ap ≥ 0; and (3) +PR. Decision for concomitant PR was performed at the surgeon's discretion and included posterior colporrhaphy, perineorrhaphy, or sacrocolpoperineopexy. Five-year outcomes were dichotomized into presence/absence of pPOP (Ap > 0) and OD symptoms of moderate or greater bother (≥2) on 1 or more Pelvic Floor Distress Inventory questions about digital assistance, excessive straining, or incomplete evacuation. Composite failure during the 5-year interval was defined by both pPOP and OD symptoms or pPOP reoperation.

Completed baseline and 5-year outcomes were available for 90 participants (60%); mean (SD) follow-up was 7.1 (1.0) years. At 5 years, only 2 women (6%) with no PR (AP < 0) developed de novo pPOP with OD symptoms; 1 of these underwent subsequent PR. Without PR repair, nearly all participants (23/24; 96%) demonstrated sustained resolution of pPOP, and none underwent PR within 5 years. Obstructed defecation symptoms improved in all groups after ASC with or without PR, although OD symptoms were still present at 5 years, with rates ranging from 17% to 19%.

Regardless of concomitant PR, symptomatic pPOP is common 5 years after ASC. Obstructed defecation symptoms may improve after ASC with or without PR. Additional studies are needed to define criteria for performing PR at the time of planned ASC.

EDITORIAL COMMENT

(It is difficult to know whether to attribute a pelvic floor dysfunction patient's defecatory symptoms to posterior prolapse observed during a Pelvic Organ Prolapse Quantification examination. Obstructed defecation (OD) is one form of defecatory dysfunction, and these complaints are common in women with pelvic organ prolapse but also often observed in women with normal...
posterior vaginal support, and it is often impossible to determine whether the chronic straining of OD occurred as a result of, or resulted in, pPOP. Furthermore, although repair of the posterior compartment often results in relief of OD symptoms, evidence on the effect of apical prolapse repair is mixed. Clinical practices by experienced surgeons vary widely, with some espousing posterior compartment repairs in nearly every patient with OD, and some advocating repair of only the apex, with interval posterior repair (PR) only if indicated by persistence of OD symptoms.

This report of the E-CARE study which reported 5-year outcomes of women in the extended follow-up study of the CARE randomized trial of colpopexy with or without Burch urethropexy addressed this specific issue of the posterior compartment. Sixty-one of the 90 women had no PR at the time of colpopexy, and the women in this group were roughly evenly divided as to whether they had precolpopexy pPOP beyond the hymen (n = 37) or not (n = 24). Twenty-nine women had +PR at the time of colpopexy. Obstructed defecation symptoms were common in all 3 groups before colpopexy although most prevalent in the +PR group at 48%. The prevalence of no OD symptoms and no pPOP after colpopexy, however, was roughly the same in all 3 groups (approximately 80%), as was the prevalence of OD symptoms without pPOP (approximately 12%–16%).

These findings, at the least, support studying expectant management of the posterior vaginal compartment in patients having apical prolapse repair. It may be better to perform a staged procedure only in those patients who develop new or persist in having pPOP after colpopexy because posterior colporrhaphy and perineorrhaphy can be associated with hematoma and dyspareunia and potentially increases the risk for mesh erosion.—ACW)

---

**Risk Factors for Long-term Failure of the Retropubic Tension-Free Vaginal Tape Procedure**

**Rune Svenningsen, Anne C. Staff, Hjalmar A. Schiøtz, Kari Western, Leiv Sandvik, and Sigurd Kulseng-Hanssen**

Department of Gynaecology, Oslo University Hospital (R.S., A.C.S.); Faculty of Medicine, University of Oslo, Oslo (R.S., A.C.S., L.S.); Department of Obstetrics and Gynaecology, Vestfold Hospital, Tønsberg (H.A.S.); Department of Obstetrics and Gynaecology, Østfold Hospital, Fredrikstad (K.W.); Unit of Biostatistics and Epidemiology, Oslo University Hospital, Oslo (L.S.); and Department of Obstetrics and Gynaecology, Asker and Bærum Hospital, Bærum, Norway (S.K.-H.)

Neurourol Urodynam 2014;33:1140–1146

**ABSTRACT**

The development of minimally invasive techniques to restore continence in women with stress urinary incontinence (SUI) led to the introduction of the retropubic tension-free vaginal tape (TVT) procedure in 1996. A number of studies have demonstrated promising long-term results after use of retropubic TVT. The largest long-term follow-up study to date was published in 2013 by the authors of the present study. Data from that study showed excellent long-term outcomes with low 10-year subjective and objective failure rates.

The aim of this study was to identify potential risk factors of long-term (10-year) subjective and objective failure after the retropubic TVT procedure. A secondary risk analysis was performed merging 10-year outcome data from the 2013 study with additional preoperative and operative information individually stored in the Norwegian Female Incontinence Registry. Data were obtained on potential risk factors of subjective failure 10 years after TVT from 483 women with the use of a validated questionnaire. Data on potential risk factors of objective failure at 10 years were obtained from 327 women with the use of a standardized stress test. Logistic regression analyses were used to assess preoperative and operative data stored in the Norwegian Female Incontinence Registry. Subjective failure was defined as the...