

Anterior Vaginal Wall Suspension Procedure for Moderate Bladder and Uterine Prolapse as a Method of Uterine Preservation

Burhan Coskun, Rebecca S. Lavelle, Feras Alhalabi, Alana L. Christie and Philippe E. Zimmern*

From the Department of Urology, UT Southwestern Medical Center, Dallas, Texas

Purpose: We report our experience with anterior vaginal wall suspension for moderate anterior vaginal compartment prolapse and uterine descent less than stage 2.

Materials and Methods: Data on patients who underwent anterior vaginal wall suspension with uterine preservation by hysteropexy and had a 1-year minimum followup were extracted from a long-term, prospective, institutional review board approved, surgical prolapse database. The indication for uterine preservation was uterine descent not beyond the distal third of the vagina with traction with the patient under anesthesia, and negative Pap smear and pelvic ultrasound preoperatively. The upper suture of the anterior vaginal wall suspension secures the cardinal ligament complex, allowing for uterine suspension once the suture is transferred suprapubically. Failure was defined as prolapse recurrence greater than stage 2 on physical examination or the need for reoperation for uterine descent. Outcome measures at serial intervals included validated questionnaires, physical examination, standing voiding cystourethrogram at 6 months postoperatively and complications.

Results: From May 1996 to March 2012, 52 of 739 patients met inclusion criteria. Mean followup was 55 months (range 12 to 175, median 44). Mean patient age was 62 years (range 38 to 81), mean body mass index was 26.7 kg/m² (range 18.3 to 49.4) and mean parity was 2.7. There were no transfusions or intraoperative complications. Overall 7 (13%) patients underwent subsequent hysterectomy for uterine prolapse recurrence at 7 months to 6 years postoperatively.

Conclusions: The anterior vaginal wall suspension procedure offers a simple, mesh-free surgical alternative with acceptable long-term followup in patients with moderate uterine prolapse who wish for uterine preservation. However, patients should be appropriately counseled about the low risk of subsequent hysterectomy.

Key Words: cystocele, female, urology, uterine prolapse

WHEN pelvic organ prolapse involves uterine descent,¹ hysterectomy has been considered part of surgical management. However, the necessity of hysterectomy has been increasingly questioned, especially in the last decade. The rationale for removing

the uterus is based on preventing recurrent prolapse and avoiding future malignancy.² However, some have argued that hysterectomy may disrupt natural support structures, thus causing further pelvic floor dysfunction and unmasking urinary

Abbreviations and Acronyms

AVWS = anterior vaginal wall suspension
 IIQ-7 = Incontinence Impact Questionnaire
 POP = pelvic organ prolapse
 QOL = quality of life
 SUI = stress urinary incontinence
 UAR = urethral axis at rest
 UAS = urethral axis with straining
 UDI-6 = Urogenital Distress Inventory-short form
 VCUG = voiding cystourethrogram

Accepted for publication June 6, 2014.

Study received institutional review board approval.

* Correspondence: Department of Urology, UT Southwestern Medical Center, Dallas, Texas (e-mail: philippe.zimmern@utsouthwestern.edu).

incontinence.³ Preservation of the uterus during POP surgery has also been considered for other reasons including patient body image, potential effect on sexual function and preservation of future fertility. Furthermore, uterine preserving procedures may decrease perioperative morbidity, including a shorter operating time, lower complication rates and faster recovery time.⁴

Although the interest in uterine preservation has recently increased, this concept is not new. Uterine preservation was described as early as 1888 by Manchester,² and then proposed again by Huguier and Scali⁵ in 1958. Abdominal as well as vaginal approaches have been reported to repair apical prolapse with uterine preservation. The techniques involve anchoring the cervix or uterus using the uterosacral ligament,⁶ sacrospinous ligament⁷ or sacral promontory.⁸

The surgical technique of anterior vaginal wall suspension has been described as an effective procedure to correct anterior vaginal compartment prolapse associated with SUI from urethral hypermobility regardless of the presence or absence of the uterus.⁹ We describe our long-term experience with this mesh-free vaginal approach to anterior compartment prolapse in a subset of patients who were candidates for uterine preservation and had early stages of uterine descent noted intraoperatively.

METHODS

Data on patients who underwent AVWS with uterine preservation and had a 1-year minimum followup were extracted from a long-term, prospective, institutional review board approved, surgical prolapse database. In this report the term anterior prolapse is used to describe the finding on physical examination of prolapse of the anterior vaginal wall compartment. The term cystocele is used when prolapse is noted on imaging or at the time of surgery to contain bladder.

Uterine preservation was offered to women with urinary incontinence and associated anterior prolapse of early stage (less than 2) who had a negative Pap smear

and normal pelvic ultrasound preoperatively. The patients who expressed a desire to retain the uterus were considered for uterine preservation intraoperatively if the uterine descent was not estimated beyond the distal third of the vagina with traction while the patient was under anesthesia. The traction on the cervix was done by the same operator using a tenaculum clamp at the beginning of the procedure (fig. 1, A and B). At the start of this study a pulling technique allowing more accurate standardization had not been released yet.¹⁰ Patients were consented for possible vaginal hysterectomy if the cervix reached or extended beyond the distal third of the vagina, along with an apical fixation repair procedure.

The AVWS procedure entails the placement of 2 sets of nonabsorbable sutures passed helically just beneath the anterior vaginal wall from the bladder neck to the upper vagina (fig. 2).⁹ These sutures anchor a broad segment of anterior vaginal wall, thus providing wide support to the bladder base. To achieve cervico-hysteropexy as part of the repair the upper or proximal suspension sutures are secured in the cardinal ligament complex at the vaginal apex lateral to the cervix. After the sutures are placed, a short (2 to 3 cm) midline suprapubic incision is performed to expose the tendinous portion of the rectus fascia at the back of the pubis. Next, with blunt and sharp dissection the endopelvic fascia is perforated, and the retropubic space is entered. A double prong needle is then passed under finger guidance from the suprapubic region down into the vagina. The suspension sutures are threaded through the eyes of the ligature carrier, which is then withdrawn suprapubically, allowing the transfer of the suspension sutures from the vagina to the suprapubic region. After injection of intravenous indigo carmine, cystoscopy is performed to ensure no suture entry in the anterior bladder wall and no ureteral injury. After each vaginal incision is closed the suspension sutures are tied without tension over a rubber shod right-angle clamp above the tendinous portion of the rectus fascia.⁹ This maneuver is done to provide support of the anterior compartment, while avoiding hypersuspension that could verticalize the vagina and unmask posterior compartment and/or apical defects. The final result is shown in figure 1, C.

Preoperative assessment involved a structured history, physical examination (Baden-Walker grading of the prolapse and more recently a POP-Q evaluation), validated questionnaires, including UDI-6,¹¹ IIQ-7¹¹ and a global

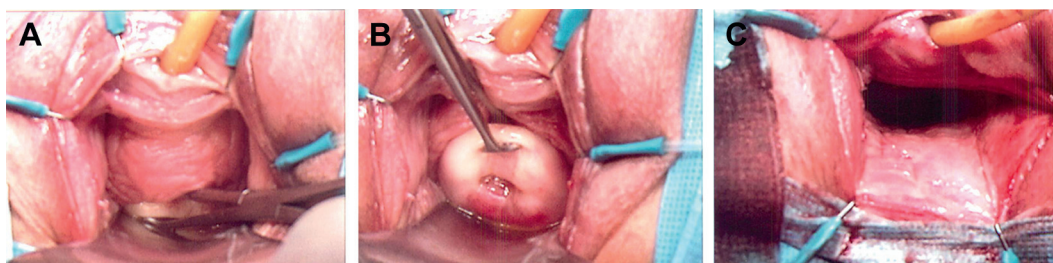


Figure 1. Intraoperative views of moderate cystocele before AVWS (A), same patient with traction on cervix using tenaculum clamp (B) and final anatomical results after AVWS (C).

Download English Version:

<https://daneshyari.com/en/article/3863945>

Download Persian Version:

<https://daneshyari.com/article/3863945>

[Daneshyari.com](https://daneshyari.com)