

Vaginal Subtotal Hysterectomy and Sacrospinous Ligament Fixation for Correcting Severe Uterine Prolapse

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Vaginal subtotal hysterectomy was first carried out in 1906, but it did not gain wide acceptance [1]. Owing to the lower risk of cervical stump cancer with modern smear screening tests and the belief that preservation of the cervix aids the maintenance of normal sexual function, subtotal hysterectomy has experienced a resurgence of popularity recently, which has been accompanied by the development of laparoscopic approaches to carrying out the operation [2]. In selected cases, subtotal hysterectomy is a suitable alternative to total hysterectomy for the treatment of benign gynecological disease. Sacrospinal ligament fixation has been regarded for many years as a therapeutic tool that can be used for the treatment of uterovaginal prolapse [3]. Herein, the author would like to present the successful use of vaginal subtotal hysterectomy and sacrospinous ligament fixation in a premenopausal woman with adenomyosis and severe uterine prolapse.

SURGICAL TECHNIQUE

- After spinal anesthesia is induced, the patient is placed in the dorsal lithotomy position and the labia are retracted with stay sutures. The bladder is initially catheterized and left to undergo free drainage.
- A. A weighted speculum is placed in the vagina, the cervix is pulled firmly downward with two tenacula and an anterior colpotomy is performed 1 cm above the cervix. A transverse incision is made from the 10 o'clock to 2 o'clock position.
 - B. Next, the bladder is dissected upward and the anterior vesicouterine peritoneum is entered. A vaginal wall retractor is inserted anteriorly to retract the bladder away from the cervix.
 - C. A Towel clamp is placed on the uterine fundus, which is then delivered through the incision by pushing the cervix upward and backward. Another Towel clamp is applied to uterus just above first Towel clamp site to bring the fundus further downward and forward while simultaneously releasing the cervical tenacula.
 - D. The round ligaments are divided and suture ligated with absorbable sutures. The tubo-ovarian pedicles are clamped, cut, and suture ligated.
 - E. After further dividing the broad ligament from each side of the uterus, the uterine arteries and veins are then clamped, cut, and suture ligated.
 - F. The uterine body is cut off at the cervicouterine junction using electrocautery.
 - G. The endocervix and exocervix are ablated electrocautery to minimize the potential for vaginal bleeding and neoplastic transformation.
 - H. The edges of the cervix are approximated with continuous absorbable sutures.
 - I. The bladder peritoneum is closed.
 - J. Lastly, the sacrospinous ligament fixation procedure is performed.

The posterior vaginal wall is opened to the cervix and the rectovaginal space entered. The rectovaginal space is dissected with the operator's index finger to the right ischial spine. Next, the ischial spine and sacrospinous ligament are palpated and identified. Using a Miya hook, two No. 1 Prolene sutures (Ethicon Inc, Somerville, NJ, USA) are placed through the ligament two fingers breadth medial to the ischial spine. After releasing the Miya hook, one end of each suture is sewn to posterior cervical stump near uterosacral ligament site and to the apex of posterior vaginal wall without involving epithelium. Sacrospinous ligament fixation is then carried out using a pulley stitch. The cervical sacrospinous sutures are then tied and the posterior vaginal skin is closed.

COMMENTS

Since the introduction of laparoscopic surgery over the last decade, interest in subtotal hysterectomy has increased. However, most gynecologists do not perform laparoscopic procedures as proficiently as experienced laparoscopists. Taking the former into account, subtotal hysterectomy by the vaginal route is less challenging for a gynecologist who has had experience in vaginal surgery and the procedure avoids laparoscopic risks. The procedure of sacrospinous ligament fixation is performed entirely through the vagina, eliminating the morbidity of major abdominal surgery. It has been proved to have good effect when correcting uterus or vaginal vault prolapse [4]. Most importantly, one can performed other pelvic reconstructive operations by the same surgical approach when indicated. After counseling about the possible risks and benefits, it is reasonable to offer vaginal subtotal hysterectomy and sacrospinous ligament fixation in women with benign uterine diseases that coexist with severe uterine prolapse [5].

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