High Uterosacral Ligament Suspension for Apical Prolapse: An Asset

Anuja V Bhalerao

ABSTRACT

Pelvic organ prolapse is a challenging entity and more so which method to opt for vault suspension. Literature mentions so many, such as McCalls culdoplasty, sacrospinous fixation, and high uterosacral suspension. Each one has its merits and demerits. Uterus and apical part of vagina remain above the pelvic floor due to lot of support. Loss of these support results in pelvic organ prolapse. High uterosacral ligament suspension (HUSLS) allows vaginal repair of all defects. The apex is supported bilaterally and normal axis is restored, which prevents the recurrence of pelvic organ prolapse.

Keywords: Pelvic organ prolapse, Uterosacral ligament, Vault suspension.

How to cite this article: Bhalerao AV. High Uterosacral Ligament Suspension for Apical Prolapse: An Asset. J South Asian Feder Obst Gynae 2017;9(4):431-432.

Source of support: Nil
Conflict of interest: None
Date of received: 10 November 2017
Date of acceptance: 20 December 2017
Date of publication: April 2018

INTRODUCTION

Pelvic organ prolapse is a challenging entity and more so which method to opt for vault suspension.

Literature mentions so many, such as McCalls culdoplasty, sacrospinous fixation, and high uterosacral suspension. Each one has its merits and demerits.

Uterus and apical part of vagina remain above the pelvic floor due to lot of support. Loss of these support results in pelvic organ prolapse. High uterosacral ligament suspension allows vaginal repair of all defects. The apex is supported bilaterally and normal axis is restored, which prevents the recurrence of pelvic organ prolapse.

The anatomical success rate of HUSLS in literature is 77 to 99% after mean follow-up of 13 to 33 months, and 89% women show resolution of prolapse symptoms and express satisfaction with the procedure. Functional and quality of life results are available only in two studies. Apart from routine or common complications, the incidence of ureteric injuries is 1 to 11%, so a cystoscopy is a must after every HUSLS.

Uterosacral ligaments are palpable posterior portions of the cardinal uterosacral ligament complex at S2, S3 level, and comprises small vessels, nerves, connective tissue, and smooth muscles. Uterosacral ligaments support cervix, vagina, and form an important endopelvic suspensory support true to uterus and vagina.

Ureters are anterolateral to uterosacrals and during their course they converge toward vagina. As per Jerome Buller, ureters are 0.9 cm from vagina, 2.3 cm in intermediate portion, and 4.1 cm in sacral portion of uterosacral ligaments.

Here is a systematic approach for HUSLS. The peritoneal cavity is entered and distal parts of uterosacrals identified. Two to three sutures are taken in intermediate or distal portions of uterosacrals. These uterosacral sutures are secured to vaginal walls and anterior and apical portion of anterior and posterior endopelvic fascia. Tying these closes the vaginal cuff and suspends it to uterosacrals.

As the incidence of ureteric complications is high, cystoscopy is done for patency of the ureters. This procedure can be done in women with vaginal wall prolapse or uterovaginal prolapse. In women where hysterectomy is needed one can approach peritoneal cavity after hysterectomy or in women with vaginal wall prolapse enterocoele sac is dissected, excised, and peritoneal cavity is accessed.

To facilitate this procedure, certain instruments are required as long needle holders, Allis tissue forceps, and retractors.

Step 1
• Access to peritoneal cavity.

Step 2
• Ensure adequate exposure
• To visualize lateral wall large moistened pack is used along with retractors.
Step 3
- Identification of distal uterosacral ligaments
- Pull the apical portion toward ceiling so that uterosacral ligaments can be palpated per abdomen examination, per rectal examination.

Step 4
- Grasp the uterosacral ligaments
- 2 cm cephalic and medially palpating the ischial spine.

Step 5
- Pass sutures through uterosacral ligaments
- A series of two to three sutures are passed in intermediate portion progressing distally
- Proximal one being PDS 2-0, and distal one being Ethibond 3-0 or proline 2-0, these sutures are then snapped well to avoid tangling
- While passing these sutures, control is more required at entry point than exit and sutures should always be from lateral to medial to avoid injury to ureters.

Step 6
- Anterior colporrhaphy.

Step 7
- Secure the sutures through the fibromuscular portions of anterior and posterior vaginal walls in series from lateral to medial
- The delayed absorbable sutures are passed through uterosacral and vagina along with fibromuscular tissue
- Ureters do not deviate with movement of uterosacral ligaments.

Step 8
- Tighten the nonabsorbable sutures tying toward sacrum.

Step 9
- Trim vaginal epithelium if required, vagina is closed, and delayed absorbable sutures are tied.

Step 10
- Cystoscopy is done.

ADVANTAGES
By doing HUSLS, the vagina is symmetrically supported directed toward the hollow of sacrum.
- Posterior colporrhaphy and perineorrhaphy complete the procedure.
- The HUSLS provides excellent suspensory support to vaginal wall. Vagina is suspended over the levator ani with normal axis toward sacrum. The HUSLS is highly recommended for young women with pelvic organ prolapse as vaginal length is not altered at all and so is the quality of life.

ACKNOWLEDGMENTS
Author would like to extends his regards to Prof Shull (USA) and Prof Rajamaheshwari for teaching him HUSLS, an asset for pelvic organ prolapse and also to Dr Vivek, Dr Krutika, Omkar, and Dr Richa Garg.

REFERENCE