

**TRANSVAGINAL SACROSPINOUS LIGAMENT FIXATION FOR PELVIC ORGAN PROLAPSE**Hypothesis / aims of study

The elderly women are often annoyed with deterioration of QOL due to pelvic organ prolapse including prolapse and vaginal wall or apical segment of the vagina. These symptoms are often accompanied by stress urinary incontinence (SUI) and recur during the follow-up after the previous surgical treatment for pelvic organ prolapse. Transvaginal sacrospinous ligament fixation (SSLF) is one of the conventional and simple procedures for treating prolapse of the apical segment of the vagina. To assess the preventive effects of transvaginal sacrospinous ligament fixation on recurrence of prolapse and SUI, the therapeutic outcomes of patients mainly with vaginal wall prolapse treated with SSLF and colporrhaphy in combination with other procedures for various symptoms of pelvic organ prolapse were retrospectively investigated.

Study design, materials and methods

A total of 73 patients with a mean age of 65.6(47 ~ 84) years underwent SSLF procedure via vaginal approach in combination with other surgical procedures such as colporrhaphy, anti-SUI surgeries, or hysterectomy. Sixty-seven and 21 and 23 patients were associated with prolapse of anterior wall and posterior wall and apical segment of the vagina, respectively. Thirty-three patients concomitantly had SUI. Surgical histories were hysterectomy in 12 patients, bladder neck suspension or tension-free vaginal tape (TVT) sling in 3 patients, and anterior or posterior colporrhaphy in 5 patients. We evaluated the medium-term outcomes of these patients with pelvic organ prolapse basically treated with using colporrhaphy and SSLF.

Results

Two patients were treated with SSLF alone while the remaining 71 patients underwent SSLF and other surgical procedures as follows; anterior colporrhaphy in 62 patients, posterior colporrhaphy in 15 patients, and hysterectomy in 11 patients with prolapse of the cervix or uterus. All patients with anterior or posterior vaginal wall prolapse showed a complete cure immediately after operations. Four (5.4%) and 7 (9.6%) of 73 patients developed recurrence of low-stage anterior and posterior vaginal wall prolapse, respectively, at the median follow-up of 36 (mean:40±23) months. Among 33 patients with SUI, bladder neck suspension and TVT sling and Kelly's periurethral plication was performed in 5 and 17 and 11 patients with SUI, respectively. Twenty-eight (85%) of 33 SUI patients showed a complete cure and no recurrence of SUI. One patient had persisting SUI after TVT sling and 4 patients showed recurrence of SUI after each anti-SUI surgery. None of 40 patients without SUI showed new occurrence of SUI after operations in combination with SSLF. All of 23 patients with the vaginal apical segment were cured completely without recurrence. Vaginal wall fixation to sacrospinous ligament was retained during the follow-up period in 71 patients (97%). Among all patients, nobody showed new occurrence of prolapse of the vaginal apical segment after operations. No patients had wound infection or injury of the rectum and bladder caused by SSLF procedures, whereas 8 patients complained of transient neuralgia of the ipsilateral gluteal and dorsal thigh lesion associated with SSLF during the postoperative 10 days.

Interpretation of results

The recurrence rates of SUI 4 years and more after operations were reportedly about 40% in periurethral plication, 30% in needle bladder neck suspension, 16% in retropubic bladder neck suspension, and 13% in TVT sling (1). In our series of patients with SUI, the recurrence rate of SUI was markedly decreased around 10-20% in each procedure in combination with SSLF. Moreover, SSLF seemed to contribute to prevention of recurrence or new occurrence of pelvic organ prolapse among those patients (2).

Concluding message

The present outcomes suggests that SSLF is a safe, low-cost, and feasible procedure for various types of pelvic organ prolapse, not only to treat vaginal vault prolapse, but also to prevent recurrence of vaginal wall proplase or SUI.

References

1. J Urol 1997; 158: 875-800
2. Am J Obstet Gynecol 1998; 179: 1465-1471

<b>Specify source of funding or grant</b>	none
<b>Is this a clinical trial?</b>	No
<b>What were the subjects in the study?</b>	HUMAN
<b>Was this study approved by an ethics committee?</b>	Yes
<b>Specify Name of Ethics Committee</b>	This study was approved by the Nara Medical University Hospital Institutional Review Board and followed the Declaration of Helsinki. Informed consent was obtained from the patients.
<b>Was the Declaration of Helsinki followed?</b>	Yes
<b>Was informed consent obtained from the patients?</b>	Yes