

## EFFECT OF UTERINE PRESERVATION ON LONG-TERM OUTCOMES OF SACROSPINOUS LIGAMENT FIXATION FOR TREATING FEMALE PELVIC ORGAN PROLAPSE

### Hypothesis / aims of study

The aims of this study were to evaluate the postoperative subjective outcome and satisfaction in female patients who underwent sacrospinous ligament fixation (SSLF) with and without concomitant hysterectomy for treating pelvic organ prolapse (POP).

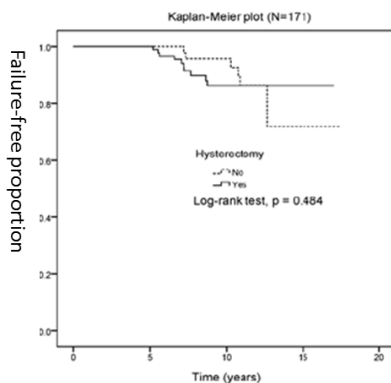
### Study design, materials and methods

Female patients who underwent surgery for POP at A University Hospital from January 1994 to December 2007 were included in this study, consecutively. In this retrospective study, all patients underwent a unilateral vaginal SSLF (right side of patient) with or without vaginal hysterectomy and concomitant anterior-posterior vaginal wall repair. We reviewed the chart records for preoperative and postoperative history, pelvic examinations, urodynamic studies, early postoperative complications, or adverse effects related to this procedure. The subjective outcome of the operation was measured by patient self-reports as successful, improved, or failure of treatment, assessed by a nursing coordinator who interviewed patients by telephone in May 2008 and July 2016. Global improvement of POP was used to assess the outcome of treatment. Regarding the patient's overall impression of the procedure, two main questions were asked of these women. For the patient's perception of the operation's outcome: "Do you consider this operation to have been: successful, an improvement, or a failure? If you consider it a failure, when did it start to fail?" For present satisfaction: "Compare your present situation with that before the operation, do you feel satisfied with the outcome, and if not, when did your dissatisfaction begin and what are the symptoms that bother you?" Kaplan-Meier analysis was used to demonstrate the operative outcomes and self-reported satisfaction. Cox proportional hazard model was used to evaluate the correlation between various associated factors and the outcome of the operation in 2008 and 2016.

### Results

A total of 210 patients were included in this study. After a mean follow-up of 13.58 years (range: 9-23 years), 171 (81.4%) patients responded to the telephone interview by July 31, 2016. The mean age was 59 years (range 27-88) at operation and median parity was 4 (range 0-11). A total of 107 (62.6%) patients had a history of hysterectomy or concomitant vaginal hysterectomy during the operation and 64 (37.4%) patients had sacrospinous hysteropexy with uterine preservation. Voiding difficulty (11.6%) is the most common post-operative complication. De novo frequency/urgency and buttock pain presented as 8.1% and 6.1 % respectively. The subjective patient-reported outcomes were: 41% (70/171) said that the operation was successful, 49.1% (84/170) had improved, and 9.9% (17/171) had failed.

#### Success rate between SSLF with and without hysterectomy



#### Cox proportional hazard model for SSLF without hysterectomy compared to SSLF with Hysterectomy (N=148)

	HR	95% C.I.
With hysterectomy	1.52	0.50-4.60
Age	0.99	0.92-1.07
BMI	1.03	0.89-1.20
Parity	1.43	0.94-2.16
Menopause	1.14	0.19-6.87

### Interpretation of results

One hundred and forty-nine (87.1%) women were satisfied with the outcome of the operation in 2016. The adjusted hazard ratio for uterine preservation in 2008 was significantly better than patients without uterine preservation. However, the adjusted hazard ratio for uterine preservation was 0.7 (95% CI 0.2-2) in 2016.

### Concluding message

Our results imply that SSLF with uterine preservation has significantly better outcome at mid-term (< 10 years) follow-up than SSLF with concomitant hysterectomy for treating POP. However, there is no significantly statistical difference between long-term outcome of SSLF with and without hysterectomy.

### Disclosures

**Funding:** none **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** routine outcome assessment and chart reviewing **Helsinki:** Yes **Informed Consent:** Yes