

SHORT- TERM OUTCOME OF PELVIC RECONSTRUCTIVE SURGERY WITH PROSIMA SYSTEM

Hypothesis / aims of study

The purpose of this study was to evaluate the short term outcome of pelvic reconstructive surgery with Prosima system, a single incision, non anchored transvaginal mesh, in pelvic organ prolapse women.

Study design, materials and methods

Patients with POP-Q stage II-IV who underwent transvaginal pelvic reconstructive surgery with Prosima device between August 2010 and August 2011 were reviewed. The preoperative and postoperative clinical examination including the International Continence Society Pelvic Organ Prolapse Quantification system (ICS POP-Q) and UDI-6 and IIQ-7 questionnaires.

Results

A total of 50 women received the surgery with Prosima mesh, the mean age of the women was 62 years (range, 34-83 years) and mean parity was 3.4 (range, 1-7). There were six cases had preserving uterus including one trachelectomy, 37 cases had transvaginal hysterectomy and seven cases were vaginal vault prolapse. Nine of the 50 women had concomitant midurethral sling procedure, including 1 TVT secur, 5 MiniArc and 3 TVT-O. The mean follow-up duration was 7 months (range, 3-14). Intraoperative bladder laceration was met in three cases, two of these three cases had anterior Prosima mesh placement after well repairing of the bladder, one cases gave up the placement of anterior Prosima mesh. The mean value of pain score (scale 0-10) at 24 hr after surgery was 1.36 (range, 0-3). Ten (20%) patients discharged on post-op day2, 25(50%) patients discharged on post-op day3. One (2%) had vaginal hematoma after discharge, but this condition was well managed with conservative packing of vagina. Mesh exposure rate was 6%. Two patients had vaginal support device (VSD) in situ less than 21 days. Five (10%) patients were noted to have postoperative stress urinary incontinence. The short-term primary anatomic success, defined as POP-Q stage 0-I, was 90%. Two patients had recurrent cystocele stage II, 3 patients had recurrent cystocele stage III. Subjective satisfactory rate of this procedure was 81.8%. There were no life-threatening complications. Pelvic symptoms and quality of life evaluated by UDI-6 and IIQ-7 improved significantly from baseline.

Interpretation of results

The short term primary anatomic success (POP-Q stage 0-I) was 90%. The functional outcomes were significantly improved after operation. The design of single-incision approach, non-anchored and no fixation characteristics of Prosima system results in less postoperative pain and rapid recovery. The hospital stay was shortening, 70% of cases discharged before post-op day 2.

Concluding message

These results suggest that Prosima system is a safe and effective treatment for women with symptomatic pelvic organ prolapse in the short term.

Table 1. Patients demographics

Patients (n=50)	
Age, mean years (range)	62 (34-83)
Mean parity (range)	3.4 (1-7)
Mean BMI (kg/m ²)	24.7 (20.1-35.3)
Diabetes mellitus (n, %)	7 (14.0%)
Previous surgery (n, %)	7 (14.0%)
VTH+A-P repair (n)	2
LAVTH (n)	2
ATH (n)	3
ICS POP-Q	
Stage II (n, %)	4 (8%)
Stage III (n, %)	41 (82%)
Stage IV (n, %)	5 (10%)

Table 2. Other concomitant procedures done

Surgery (Prosima with ...)	Number(n=50)
Previous hysterectomy (vault prolapse)	7
Prosima	2
Prosima + TVT-secur	1
Prosima + MiniArc	4
VTH and	37
Prosima	27
Prosima + USO	3
Prosima + <u>Bladder repair</u>	3
Prosima + MiniArc	1
Prosima + TVT-O	3
Preserved uterus and	6
Prosima	5
Prosima + trachelectomy	1

Table 3. Anatomic outcomes presented with POP-Q stage

	Pre-OP	Post-OP
POP-Q stage (leading edge)		
0-I (n,%)	0(0%)	45 (90%)
II	4 (8%)	2 (4%)
III	41 (82%)	3 (6%)
IV	5 (10%)	0