404 Comparison of tension-free vaginal mesh surgery and laparoscopic sacrocolpopexy concerning subsequent lower urinary tract symptoms in patients with pelvic organ prolapse – non-randomized prospective study

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Introduction

- In Japan, laparoscopic sacrocolpopexy (LSC) became covered by insurance in 2014.
- Many reports suggested its potential superiority in incidence of perioperative complications, disease recurrence and patient satisfaction compared with tension-free vaginal mesh (TVM) surgery.
- The trend of treatment selection for pelvic organ prolapse (POP) has shifted from TVM surgery to LSC.
- There are few reports on lower urinary tract symptoms (LUTS) directly compared between TVM surgery and LSC.
- In this study, we compared TVM surgery and LSC concerning the LUTS before and after surgery in non-randomized prospective study.

Materials and Methods

- From April 2014 to March 2017, we experienced a total of 40 surgical cases of POP (20 cases with TVM surgery and 20 cases with LSC) that were enrolled in this study, each with a postoperative observation period more than 1 year.
- The evaluated parameters included perioperative variables (age, degree of POP, time of surgery and blood loss), before and postsurgical time course of international prostate symptom score (IPSS), IPSS-quality of life (QOL), maximum flow rate (Qmax) and postvoid residual urine (PVR).
- We obtained a written informed consent from all enrolled patient before surgery.

Results

Table 1.

	TVM (n=20)	LSC (n=20)	P value
Age, years	75 (60–83)	69 (58–79)	<0.05
POP stage			
Ⅲ	16	15	n.s.
Ⅳ	4	5	
Concomitant TVT or TOT	4	0	
Operation time (min)	65 (41–127)	155 (126–242)	<0.01
Blood loss (ml)	79 (5–430)	10 (5–55)	<0.001

Fig. 1

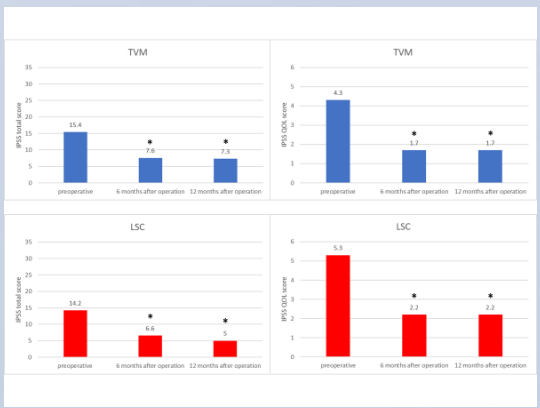


Fig. 2

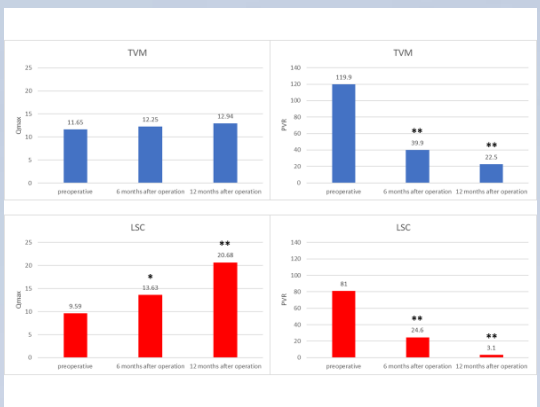
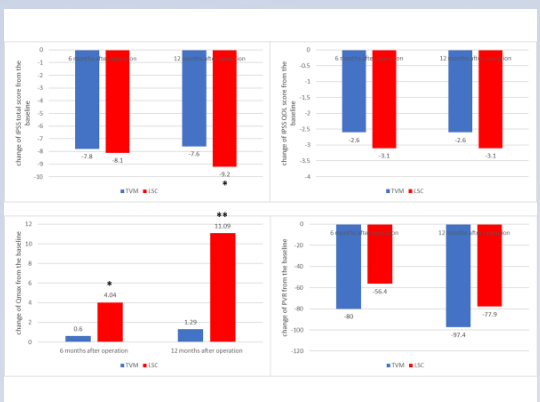


Fig. 3



Interpretation of results

- LSC had longer operation time than TVM surgery, suggesting the presence of a learning curve.
- LSC showed superior Improvements of LUTS than TVM surgery.
- One possible reason for this is that LSC requires no peeling of lateral vesical cavity compared to TVM surgery, resulting in low possibility of nerve damage.

Conclusion

- The present study indicated superior improvements of LUTS of LSC compared to TVM surgery.
- The appropriate selection of both operations is important in surgical treatment for POP.