

LAPAROSCOPIC SACROCOLPOPEXY: A PROSPECTIVE STUDY EVALUATING ANATOMICAL AND FUNCTIONAL OUTCOMES.

Hypothesis / aims of study

The aim of this study was to evaluate the anatomical and functional outcomes of laparoscopic sacrocolpopexy, in particular its effect on female sexual function.

Laparoscopic sacrocolpopexy has become an established surgical procedure for management of post-hysterectomy vaginal vault prolapse with a reported success rate of 80-98%. (ref 1) However, most of the published studies are retrospective and mainly describe objective anatomical outcomes. There is limited data in the literature on subjective functional results.

Although, such surgery inevitably has a considerable effect on a woman's sexual function, this is often ignored, as it is a difficult parameter to measure.

This is the first study evaluating sexual function after laparoscopic sacrocolpopexy.

Study design, materials and methods

A prospective observational study of women undergoing laparoscopic sacrocolpopexy for post-hysterectomy vaginal vault prolapse between February 2005 and March 2009 at a tertiary referral urogynaecology centre in the UK.

All women were examined before surgery and 3-months postoperatively. Pelvic organ support was measured objectively using the Pelvic Organ Prolapse Quantification (POP-Q) system (ref 2). They also completed a validated pelvic organ prolapse questionnaire, the International Consultation on Incontinence Questionnaire for Vaginal Symptoms (ICIQ-VS) (ref 3), before surgery and at 24 months (range 6-36 months) postoperatively.

Intraoperative and post-operative complications were recorded.

Results

84 women with a mean age of 65 years (range 49-78) were studied. In all cases the operative procedure was completed laparoscopically, with a mean duration of 64 minutes (range: 50-95 minutes). Perioperative complications were 2 bladder injuries (2%), 4 postoperative urinary tract infections (5%) and 5 suture or mesh erosions (6%).

On follow-up examination at 3 months all 84 (100%) women were found to have good anatomical vaginal vault support (Table 1).

Table 1. Objective outcomes of laparoscopic sacrocolpopexy: POP-Q measurements

		POP-Q measurements (cm) (n=84)				
		Aa	Ba	C	Bp	Ap
Preoperative	mean	-0.8	1	2	-2.0	-1.3
	range	-4 to 0	-3 to 0	-2 to 8	-6 to 2	-3 to 0
Postoperative	mean	-2.5	-5.5	-8.9	-6.5	-2.7
	range	-3 to 0	-8 to 0	-10 to -8	-8 to -2	-3 to -1

(Note: Point D is omitted due to the absence of a cervix)

56 women completed pre- and post-operative ICIQ-VS questionnaires; subjective improvements in prolapse symptoms, sexual well-being and quality of life were observed with reductions in the respective questionnaire scores.

Table 2. Subjective outcomes of laparoscopic sacrocolpopexy: ICIQ-VS questionnaire scores

		ICIQ-VS questionnaire scores (n=56),		
		VS score (VS _{max} = 53)	SS score (n=48), (SS _{max} = 58)	QOL score (QOL _{max} = 10)
Preoperative	mean	44.7	42.8	8.6
	range	35 to 52	32 to 56	2 to 10
Postoperative	mean	9.1	8.7	1.9
	range	0 to 15	0 to 18	0 to 6
Change (postop. – preop.)	mean	-35.4	-34.1	-6.7
	range	-52 to -12	-56 to -2	-10 to 3

S Vaginal symptoms (prolapse) score

SS Sexual matters score

QOL Quality of life score

VS_{max}, SS_{max}, QOL_{max} Maximum possible scores for the respective parameters

Interpretation of results

Our results support previous findings that laparoscopic sacrocolpopexy is a safe and effective surgical treatment for post-hysterectomy vault prolapse. The procedure provided excellent vault support in all 84 women studied. Intraoperative complications were rare.

The results show significant reductions in the average scores for all three domains (vaginal prolapse symptoms, sexual matters and related quality of life) of the ICIQ-VS questionnaire following laparoscopic sacrocolpopexy compared with the corresponding scores preoperatively. Therefore, it appears that overall sexual function is improved after laparoscopic sacrocolpopexy.

Concluding message

Our results show that laparoscopic sacrocolpopexy is a safe and effective surgical treatment for post-hysterectomy vaginal vault prolapse. It provides excellent apical support and good functional outcome with overall significant improvement in sexual function.

References

1. Maher C, Baessler K, Glazener CMA, Adams EJ, Hagen S. (2007). Surgical management of pelvic organ prolapse in women. Cochrane Database of Systematic Reviews, Issue 3.
3. Bump RC, Mattiasson A, Bo K et al. The standardization of terminology of female pelvic organ prolapse and pelvic floor dysfunction. Am J Obstet Gynecol 1996; 175:10–17.
2. Price N, Jackson SR, Avery K, Brookes ST and Abrams P. Development and psychometric evaluation of the ICIQ Vaginal Symptoms Questionnaire: the ICIQ-VS. BJOG 2006; 113: 700–712.

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<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	The study is a clinical audit
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes