

LAPAROSCOPIC HYSTEROPEXY: INITIAL RESULTS OF A NEW UTERINE SUSPENSION PROCEDURE FOR UTERINE PROLAPSE

Hypothesis / aims of study

The aim of this study was to evaluate the outcome of laparoscopic hysteropexy, a new surgical technique for management of uterine prolapse involving suspension of the uterus to the sacral promontory using bifurcated polypropylene mesh.

Study design, materials and methods

The investigation was designed as a prospective observational study (clinical audit) at a tertiary referral urogynaecology unit, and is ongoing. Fifty-two consecutive women with significant uterine prolapse (≥ 2 on the Baden-Walker scale), who wished to retain their uteri and elected for laparoscopic hysteropexy as one of the surgical options, have now been studied. The prolapse symptoms of these women and their impact were evaluated both before and after their operations, subjectively by means of the standardised, validated vaginal symptoms questionnaire ICIQ-VS [1] and objectively by vaginal examination using the Baden-Walker halfway system and the POP-Q scale [2].

In this **surgical technique** a Y-shaped polypropylene mesh was used to suspend the uterus from the sacral promontory. Each broad ligament at the level of cervico-uterine junction was opened through the avascular area using diathermy and scissors dissection. The vesico-uterine peritoneum was incised and the bladder dissected distally for 2-3 cm. The arms of the bifurcated mesh were then introduced bilaterally through windows created in the broad ligaments and sutured to the anterior cervix with five to six sutures. The mesh was then tacked to the sacral promontory using 5mm endosutures to elevate the uterus*.

Results

The mean age of the 52 women was 52.8 years (range 32-71 years, plus one outlier at 19 years). All were sexually active and at least three of them expressed a strong desire to have children in the future. All were available for follow-up in clinic at 10 weeks and 39 have so far completed the questionnaires. The results of monitoring their prolapse symptoms, both before and after their operations, are shown in the table below.

	Preoperative mean, (range)	10 wks postoperative mean, (range)	Change mean, (range)
Vaginal examination			
Walker grade	3.1, (2 to 4)	0.1, (0 to 2)	-3.0 (-4 to -1)
POP-Q (point C), cm	0.3, (-2 to +2)	-8.8, (-10 to -2)	-9.0 (-10 to -2)
Questionnaire assessment			
ICIQ-VS vaginal symptoms score	47.0, (32 to 60)	6.1, (0 to 14)	-41.2, (-54 to -26)
ICIQ-VS sexual matters score	41.1, (32 to 58)	6.7 (0 to 18)	-34.3, (-50 to -16)
ICIQ-VS quality of life score	8.9, (2 to 10)	1.9 (0 to 6)	-7.6 (-10 to -2)

Interpretation of results

In 51 out of 52 women the procedure was successful, with no objective evidence of uterine prolapse on examination at follow-up, and there was one failure. Significant subjective improvements in prolapse symptoms, sexual well-being and related quality of life were observed, as detected by substantial reductions in the respective questionnaire scores.

Concluding message

Laparoscopic hysteropexy is both a feasible and an effective procedure for correcting uterine prolapse without recourse to hysterectomy. It allows restoration of the vaginal axis and length without compromising its calibre and is therefore likely to improve sexual function.

References

1. Price N, Jackson SR, Avery K, Brookes ST, Abrams P. Development and psychometric evaluation of the ICIQ Vaginal Symptoms Questionnaire: the ICIQ-VS. BJOG 2006; 113:700-712
2. Baden WF, Walker T. Genesis of vaginal profile: a correlated classification of vaginal relaxation. Clinical Obstetrics and Gynaecology. 1972. 15:1048-1054

Specify source of funding or grant	None
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	This study did not require ethics committee approval, because it was designed as an observational study (clinical audit).
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes