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PROSPECTIVE STUDY OF VAGINALLY ASSISTED LAPAROSCOPIC UTERINE SACROPEXY (VALUES) WITH MESH AS A NOVEL APPROACH FOR ADVANCED UTERINE PROLAPSE.

<u>Hypothesis / aims of study</u> Uterine preserving prolapse surgery is increasingly becoming popular and viewed as an alternative to vaginal hysterectomy (1,2). Recently, total laparoscopic uterine suspension has been described (2,3), but its role in treating women with advanced uterine prolapse is not clear. The aim of this study is to prospectively assess vaginally assisted laparoscopic uterine sacropexy (VALUES) with mesh as a novel surgical treatment for POP-Q stage 3 and 4 uterine prolapse.

Study design, materials and methods. A prospective study of consecutive 45 women with stage 3 and 4 uterine prolapse who underwent VALUES were evaluated. Women filled the Prolapse Quality of Life Questionnaire (P-QOL), and underwent examination using pelvic organ prolapse quantification system (POP-Q) pre and post operatively. The mean follow up interval was 18 months (range 6-24 months).

Results The mean operative time was 122 minutes (range 45-150 minutes). The average hospital stay was 36 hours (range 22 hours – 3 days). Table 1 shows the changes in POP-Q following surgery. Preoperatively, mean point C (cervix) was +3.7 cm (range +2- +9). At follow up, Point C was < -4 cm in 43 patients (95.6%). There mean total vaginal length was 9cm (range 7.5-9.5 cm), which was not different from the preoperative TVL. Table 2 shows the changes in quality of life domains following surgery. There was a trend towards improvement in overactive bladder symptoms following surgery. Four women developed stress urinary incontinence following surgery. None of them needed anti-incontinence procedure during the follow up interval. None of the patients had mesh exposure.

Table 1 Pre-operative versus post-operative POP-Q measurements

	Preoperative	Postoperative	P Value (t test)
	Mean (range)	Mean (range)	
Point Aa	+2 (-3 - +3)	-2.3 (-3 - +3)	<0.001
Point Ba	+4.0 (-3 - +9)	-1.5 (-3 - +5)	<0.001
Point C	+3.7 (+2 - +9)	-6.7 (-8 - +5)	<0.001
Point D	+2.5 (0 - +4)	-7.5 (-9.5 - +4)	<0.001
Point Ap	+ 1.5 (-3 - +3)	-2.3 (-3 – 0)	<0.001
Point Bp	+2.5 (-4 - +6)	-1.5 (-3 - 0)	<0.001
Total vaginal length (TVL)	9.0 (7.5-9.5)	9.2 (7.5-9.5)	0.520

Table 2 Pre-operative and post-operative Prolapse Quality of Life Questionnaire (P-QQL) domains

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	Preoperative P-QOL	Postoperative P-QOL	P value	
General health	25.0 (6.3-33)	25.0 (6.3-43.7)	0.41	
Prolapse impact	88.6 (66-100)	16.0 (0-33)	<0.001	
Role limitations	50.0 (16-83)	8.5 (0-16)	<0.001	
Physical limitations	50.0 (16-66)	12.5 (0-33)	<0.001	
Social limitations	11.0 (0-66)	6.5 (0-16)	0.02	
Personal relations	33.0 (0-100)	9.5 (0-16)	0.01	
Emotions	60.0 (16-80)	6.0 (0-22)	0.004	
Sleep	50 (16-83)	16 (0-33)	<0.001	
Severity measures	50 (28.7-75)	12.5 (0-50)	0.002	

Interpretation of results Significant improvement in apical vaginal support is achieved using VALUES with minimal prolapse recurrence and change in the total vaginal length. This is associated with significant improvement in quality of life, and no cases of mesh exposure.

<u>Concluding message</u> VALUES is a safe and effective novel treatment for women with stage 3 and 4 uterine prolapse without the risk of vaginal shortening.

References

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