Sacrospinous ligament fixation with or without apical sling for apical pelvic organ prolapse. **Results from a contemporary series with mid**term follow-up

Mauricio Plata, Jessica Santander, Laura Zuluaga, Gabriela Monroy, Sebastián Peña, Carlos Gustavo Trujillo, Julián Azuero.

1. Department of Urology, Hospital Universitario Fundación Santa Fe de Bogotá and Universidad del Rosario School of Medicine, Bogotá D.C., Colombia

AIMS OF STUDY

Fixation of the vaginal apex to the sacrospinous ligament (SSL) is one of the most widely used surgical technique for pelvic organ prolapse. For all surgical corrective procedures, the quality of tissues is of paramount importance in long term outcomes. Fixation of the vaginal cuff scar tissue with stitches is one example.

We aim to describe the objective and subjective cure rates of a commercially available fixation anchoring system using two different approaches for vaginal fixation, the first using a synthetic tape (Group 1) to support the vaginal cuff or the cervix and the second using stitches to fixate vaginal cuff or cervix to SSL (Group 2).

STUDY DESIGN, MATERIALS AND METHODS

We performed a retrospective analysis of prospectively collected data on patients with symptomatic apical pelvic organ prolapse who underwent SSLF using a (Anchorsure/Surelift commercially available fixation system link ® Data was collected between January 2011 and December Neomedic). Women who had symptomatic apical prolapse and undergoing 2023. sacrospinous ligament fixation were included. Exclusion criteria were previous pelvic radiotherapy and neurological disease.

The primary outcomes for objective cure were defined as a reduction of the apical compartment to \leq 1 stage assessed by the POP-Q system and subjective cure defined as the patient's absence of vaginal bulge sensation or visualization of the prolapse inquired at medical checkups. Complications were reported using the Clavien-Dindo classification.

RESULTS

	Syntethic tape (Group 1) n=44	Stitches to vaginal cuff (Group 2) n=56	p - value
Age (years) ¥	67 ± 7	67 ± 8	0.93
BMI (kg/m2) ¥	25.34 ± 4.04	25.39 ± 2.96	0.58
Obstetric and gynaecolo	ogical history		
Pregnacies ¥	4 ± 3	3 ± 2	0.22
Vaginal delivery ¥	2 ± 2	3 ± 2	0.32
Post-menopausal *	38 (97.4)	42 (91.3)	0.24
Years to menopause ¥	15 ± 16	12 ± 12	0.83
Hysterectomy *	21 (47.7)	21 (44.7)	0.47
POP-Q stage *			
Anterior Compartment			0.64
Stage 0 - 1	4 (9.1)	2 (3.5)	
Stage 2	5 (11.4)	7 (12.5)	
Stage 3	34 (77.3)	47 (84)	
Stage 4	1 (2.3)	0 (0)	
Middle Compartment			0.58
Stage 0 - 1	0 (0)	0 (0)	
Stage 2	1 (2.3)	2 (3,6)	
Stage 3	42 (95.5)	54 (96.4)	
Stage 4	1 (2.3)	0 (0)	
Posterior Compartment	:		0.07
Stage 0 - 1	38 (86.4)	51 (91)	
Stage 2	1 (2.3)	3 (5.35)	
Stage 3	4 (9.1)	1 (1,7)	
	1 (2 2)	0 (0)	

Table 2. Effectivenes outcomes

	Global n=100	SSLF with graft (Group 1) n=44	Stitches to vaginal cuff (Group 2) n=56
Time to follow-up (months)	25 [11.5 - 46.5]	16 [2-29.5]	35 [19 - 53.5]
Subjective cure	92 (92)	42 (95.5)	50 (89.29)
Objective cure	89 (89)	41 (93.18)	49 (87.50)
Reintervention	3 (3)	1 (2.94)	2 (3.85)

	OR	95% CI
Diabetes mellitus	1.11	0.30 - 4.18
Hysterectomy	0.95	0.63 - 1.43
Vaginal delivery	1.43	1.01 - 2.02
IMC	1.05	0.86 - 1.27
IMC > 25	0.55	0.15 - 1.95
IMC > 30	2.0	0.37 - 10.76
Graft reinforcement	2.62	0.66 - 10.32

INTERPRETATION OF RESULTS

Fixation of the sacrospinous ligament is a safe and effective technique with functional results maintained over time.

A history of vaginal deliveries was statistically significantly associated with management failure.

CONCLUDING MESSAGE

Mid-term objective and subjective cure rates of SSLF are high either using the classical approach or using a reinforcing apical sling. Long term follow-up will determine if the difference in reintervention rates favors the use of an apical sling.

References:

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