

EVOLUTION OF URINARY INCONTINENCE AFTER PELVIC ORGAN PROLAPSE SURGERY: INFLUENCE OF SURGICAL APPROACH AND IMPLEMENTATION OF SUBURETHRAL SLING.

Hypothesis / aims of study

The optimal surgical treatment for pelvic organ prolapse (POP) is controversial. Furthermore, the evolution of urinary incontinence (UI) (stress urinary incontinence (SUI), urgency urinary incontinence (UUI) and mixed urinary incontinence (MUI)) after POP correction is unclear. Some authors advise the implementation of mid suburethral sling (MUS) at the time of POP surgery. However, high rates of disappearance of SUI or appearance of SUI de novo after POP correction have been communicated.

The aim of this study is to analyze the evolution of UI symptoms after surgical treatment of POP, according to the surgical approach (Laparoscopic sacrocolpopexy (LSC) or correction with transvaginal mesh (TVM)). Also analyse according to the simultaneous implementation of MUS.

Study design, materials and methods

A retrospective analysis comparing 46 consecutive procedures of LSC and 28 consecutive procedures of TVM was performed. The presence or absence of SUI, UUI and MUI were determined through the medical record and physical examination of the patients with at least twelve months of follow up after the surgical treatment.

To determine the impact of MUS at the time of POP surgery a comparative analysis was performed between the 28 procedures of TVM without MUS and 41 procedures of TVM with simultaneous MUS.

Table 1 describes the characteristics of each group.

	TVM		LSC	
	Mean (SD)	Min-Max	Mean (SD)	Min-Max
Age (years)	65.2 (9,6)	44-85	68.6 (8,49)	35-88
Operating room time	145.3 (12,3)	100-180	210.2 (62)	120-360
Operating room occupancy	3.33 (0,28)	2.29-4.12	4.82 (1,42)	2.75-8.25
Hospital Stay	5.77 (2,06)	3-16	3.77 (1,31)	2-10
	N	%	N	%
Mid subrethral sling (MUS)	41	59.4	0	0
Intraoperative complications	5	7.25	9	13.04
Minor 30 days complications	6	8.70	11	15.94
Major 30 days complications	11	15.94	4	5.8
Transfusion	1	1.45	0	0

There are no significant differences between TVM and LSC group.

Results

Table 2 shows the results of functional parameters after LSC and TVM without MUS

Type of surgery	UI prior to surgery	N	UI after POP surgery (N and %)							
			No UI	SUI	UUI	MUI				
LSC	No UI	19	13	68.42	3	15.79	2	10.53	1	5.26
	SUI	11	6	54.55	4	36.36	0	0.00	1	9.09
	UUI	6	1	16.67	3	50.00	1	16.67	1	16.67
	MUI	10	2	20.00	2	20.00	2	20.00	4	40.00
	TOTAL	46	22	47.83	12	26.09	5	10.87	7	15.22
TVM	No UI	11	6	54.55	1	9.09	3	27.27	1	9.09
	SUI	10	4	40.00	6	60.00	0	0.00	0	0.00
	UUI	3	0	0.00	0	0.00	3	100.00	0	0.00
	MUI	4	2	50.00	0	0.00	2	50.00	0	0.00
	TOTAL	28	12	42.86	7	25.00	8	28.57	1	3.57

Table 3 shows the results of functional parameters after TVM with and without MUS.

UI prior to surgery	TVT	UI after POP surgery (N and %)									
		No UI			SUI		UUI		MUI		
No UI	No	11	6	54.55	1	9.09	3	27.27	1	9.09	
	Yes	12	8	66.67	3	25.00	1	8.33	0	0.00	
SUI	No	10	4	40.00	6	60.00	0	0.00	0	0.00	
	Yes	12	4	33.33	6	50.00	1	8.33	1	8.33	
UUI	No	3	0	0.00	0	0.00	3	100.00	0	0.00	
	Yes	9	6	66.67	0	0.00	1	11.11	2	22.22	
MUI	No	4	2	50.00	0	0.00	2	50.00	0	0.00	
	Yes	8	4	50.00	0	0.00	3	37.50	1	12.50	
TOTAL	No	28	12	42.86	7	25.00	8	28.57	1	3.57	
	Yes	41	22	53.66	9	21.95	6	14.63	4	9.76	

Interpretation of results

SUI symptoms disappear after POP correction (54.55% in patients treated with LSC and 40% in patients treated with TVM). Similarly, up to a 15.79% of patients in LSC group and 9.09% of patients in TVM group that not presented UI prior to surgery, presents SUI symptoms after POP correction. In the TVM group, implementation of MUS does not modify significantly the evolution of UI.

Concluding message

There are no differences in the UI evolution regardless the surgical approach used to repair the POP. The simultaneous treatment of UI with MUS is not justified given that not modify the evolution, and in accordance with the modifications that the POP correction induced in UI symptoms.

Disclosures

Funding: There is no source of funding or grant **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Because it is a retrospective study **Helsinki:** Yes **Informed Consent:** Yes