

Results:

A total of 98 patients with a diagnosis of SUI and anterior POP were enrolled in this study, after exclusion of 10 patients with associated bladder/urethral pathology, 8 withdrew consent and refused to enroll in the study after admission. 40 patients underwent PVS, 38 TVT and only 20 underwent TOT. Forty-eight patients underwent MUS alone (Group 1), while 50 underwent MUS/AC (Group 2). Most patients completed the 12-month follow-up.

The mean age was 44.96 ± 8.13 years (range 42 to 60). All women had stress urinary incontinence and vaginal bulge as the primary complaint. A history of abdominal hysterectomy was observed in 7 patients, while 6 had anterior colporrhaphy. The baseline clinical variables are illustrated in Table 1.

In the first group (MUS only; $n = 48$), the mean PVR was 10.08 versus 10.86 in Group 2 (MUS/AC; $n = 50$) ($p=0.70$), and the mean MCC was 403.47 ± 98.04 vs 379.02 ± 111.25 . The mean compliance was 50.00 ± 19.79 in Group 1 ($p=0.29$) and 62.81 ± 18.64 in Group 2 ($p=0.25$). DO was noted in 3 (6.25%) patients in Group 1 and in 4 (8%) in Group 2 ($p=0.59$). The mean VLPP was 82.75 ± 33.5 cmH₂O in Group 1, while it was 79.14 ± 28.33 ($p=0.61$) in Group 2. The mean Q max was $22.80 \pm$

10.99/mls in Group 1 and 23 ± 11.06 in Group 2 ($p=0.87$). The mean P det Q max was 23.95 ± 21.26 in Group 1 and 16.96 ± 8.26 cmH₂O in Group 2 ($p=0.09$) using an independent t test. Table 2 demonstrates baseline urodynamics.

As shown in Table 1, the mean operative time and volume of blood loss were significantly higher in the colporrhaphy group than in the MUS alone group ($P= 0.01$ and 0.02 , respectively).

At 3 months, local PV examination was comparable between the groups, with no evidence of POP in 77.1% and 76% of the MUS and MUS/AC groups, respectively. Only one case in the MUS/AC group had vaginal extrusion, and she was managed by tape excision. One case from the MUS had recurrent incontinence (+ve stress test/pad test > 2 gm). One case in the MUS/AC group had recurrence of SUI, one had recurrence of the POP, and one had recurrence of both incontinence and prolapse. No significant difference was detected between the groups regarding PVR, pad test, and flow parameters.

Three failures were managed by redo anterior colporrhaphy, redo MUS, and combined MUS/AC.

At 6 months, no significant difference between the groups regarding PVR, pad test, and flow parameters was noted. De novo DO developed in 8

(18.6%) patients from the MUS group and in 5 (11.1%) patients from the MUS/AC group.

At 1 year, there were 43 who had completed evaluation from the first group and 45 from the second group. No more failures were reported by those who were available to the last follow-up. Table 3 demonstrates outcome measures at different follow-up intervals. The differences in UDI-6 and IIQ-7 scores at 6 and 12 months were insignificant, as shown in table 4

Table 1: Patients' characteristics

		MUS (n= 48)	MUS and AC (n= 50)	P value*
Age (years)		44.96± 8.13	47.05± 8.12	0.2
Gravidity		3.77± 1.49	4.03± 1.51	0.4
Parity		3.28± 1.21	3.44± 1.10	0.5
BMI		31.83 ± 5.09	32.58 ± 4.69	0.4
1-hr. pad test		25.34 (20-115)	25.59 (20-125)	0.56#
POP grade 1		14	16	0.6
Grade 2		34	34	0.6
HB (gm./dl)		12.52 ± 0.92	12.29 ± 1.22	0.3
ASA#	I	33 (68.75%)	27 (54%)	0.4
	II	13 (27.05%)	16 (32%)	
	III	2 (4.20 %)	7 (14 %)	
Sling type	TVT	15 (31.25%)	19 (38%)	0.34
	TOT	18 (37.50%)	17 (34%)	
	PVS	15 (31.25%)	14 (28%)	
Mean operative time (min) ± SD		44.67 ± 19.95	55.93 ± 21.99	0.01
Mean Blood loss (ml) ± SD		45.00 ± 21.40	67.02 ± 23.71	0.02
Mean PVR (after catheter removal)		11.7±38.8	8.26 ± 20.82	0.59

*Independent t- test.

#Man Whitney test.

#ASA: American Society of Anesthesiologists physical status classification

Table 2: Baseline Urodynamic parameters

	MUS (n= 48)	MUS & AC (n=50)	P va
Mean PVR±SD (ml)	10.08 (0-40)	10.86 ± (0-80)	0.7
Mean MCC±SD (ml)	403.47 ± 98.04	379.02± 111.25	0.2
Mean Compliance ±SD (ml/cmH2O)	50.00 ± 19.79	62.81 ± 18.64	0.2
DO %	3 (6.25%)	4 (8%)	0.5
Mean VLPP±SD (cmH2O)	82.75 ± 33.50	79.14 ± 28.33	0.6
Mean Qmax ±SD (ml/sec)	22.80 ± 10.99	23.21 ± 11.06	0.8
Mean PdetQmax ±SD (cmH2O)	23.95 ± 21.26	16.96 ± 8.26	0.0

*Independent t test

Table 3: Outcome at different follow up intervals

At 3- months		MUS N= 48	MUS/ AC N= 50	P value
Local examination	Normal	37 (77.1%)	38 (76%)	0.72**
	Grade I	9 (18.75%)	9 (18%)	
	Grade II	2 (4.15 %)	3 (6 %)	
complications	Extrusion	0 (0 %)	1 (2%)	0.45**
Treatment failure	MUS failure	1 (2.3%)	1 (2%)	
	AC failure	0 (0 %)	1 (2%)	
	Both	0 (0 %)	1 (2%)	
Pad wt. gain (gm) mean±SD		4.57± 17.85	5.26 ±16.14	0.85*
Q max (ml/sec) mean±SD		27.41 ±12.47	26.37 ± 13.96	0.72*
PVR (ml) mean±SD		18.73 ±37.51	8.02 ± 14.69	0.10*
Pus cells in urinalysis		8 (16.66%)	5 (10%)	0.27**
At 6- months		MUS N=48	MUS/ AC N= 50	
Local examination	Normal	37 (77.1%)	38 (76%)	0.22**
	Grade I	9 (18.75%)	9 (18%)	
	Grade II	2(4.15%)	3 (6%)	
Complications (new onset)		0	0	
Pad test gm. (mean±SD)		4.9±15.66	5.8 ±14.3	0.73*
Pus cells in urinalysis		6 (13.95%)	7 (15.5%)	0.42*
Q max ml/sec (mean±SD)		23.50 ±13.22	27.18 ±17.67	0.72*
PVR ml (mean±SD)		1.37 ± 6.69	2.70 ± 16.43	0.10*
MCC ml (Mean ±SD)		370.2 ± 108.46	352.51±105.49	0.52*
Compliance ml/cmH2O		41.76 ± 27.00	47.71 ± 41.03	0.51*

Table 4: Comparison IIQ-7, UDI-6 scores at 6 months and one year

	MUS	MUS & AC	P value *
IIQ-7 6 months (mean±SD)	6.55 ±4.90	6.37 ± 4.09	0.87
UDI-6 6 months (mean±SD)	3.94 ±5.24	4.59 ± 5.83	0.64
IIQ-7 1 year (mean±SD)	4.47 ± 5.59	5.50 ± 6.85	0.8
UDI-6 1 year (mean±SD)	7.00 ± 4.61	7.20 ± 4.31	0.5

* Paired sample t test

CONSORT flow chart of the study



