

SINGLE INCISION SLING (MINISLING) FOR THE TREATMENT OF STRESS URINARY INCONTINENCE PROVIDES EQUAL SUCCESS RATE AND HIGHER PATIENT SATISFACTION AT EARLY PERIOD WITH LESS PAIN COMPARED TO TRANSOBTURATOR TAPE

Hypothesis / aims of study

Single incision midurethral slings (SIMS) have been suggested to provide equal success rate for the treatment of female stress urinary incontinence (SUI) compared to standart midurethral slings (SMUS) in short term period. In the present study, we aimed to compare success rate, patient satisfaction and procedure related complications in patients treated by SIMS versus SMUS for the management of SUI.

Study design, materials and methods

Between October 2012 and October 2016, patients with SUI who had no mental or neurological disorders were included into the study. Women were allocated into two groups: 1st group received SMIS (Ophira®, Promedon, Argentina) (n=56) and the patients in 2nd group underwent SMUS (Betamix™, Ankara, Turkey) (n=57). Treatment outcome was assessed at 3rd week, 3rd mo, 6 mo and annually then after. Visual analogue scale, quality of life (QoL) scores were assessed pre- operatively and postoperatively using the International Consultation on Incontinence Questionnaire (ICIQ). Additionally, all patients were examined for satisfaction by satisfaction and preference questions of : 1. "Would you have again this kind of surgery?"(Q1), 2. "Do you recommend this type of surgery to patients who has SUI?"(Q2).

Results

Median follow-up was 19mo (12-48 mo) for SMUS and 26mo (2-48 mo) for SIMS group. Table 1 shows the baseline characteristics of the patients in each group. Women in the SIMS group had a lower postoperative pain during first 3 weeks (p<0.001). There was no difference in peri-operative complications and post-operative continence rates between two groups (Table 2).

Table 1. Patient's characteristics.

Characteristic	SMUS	SIMS	P value
Patients, n	57	56	
Age, median(range), yr.	49(31-65)	50(30-85)	.879
Severity of pre-op incontinence rate, n			.265
Mild(1 pad/day)	1	2	
Moderate(2-3 pad/day)	21	28	
Severe(4-5 or more pad/day)	35	26	
Postoperative follow-up, median(range), month	20(12-84)	26(2-54)	.011*

Table 2. Comparison of postoperative treatment outcomes and complications.

Characteristic	SMUS	SIMS	P value
Post-op continence rate, n			.196
Fully dry	35	42	
Improved	14	11	
Failure	8	3	
Early Groin pain, n	57	9	<.0001*
Groin pain duration, median(range), day			.003*
Early period <10 days	39	2	
10-20 days	4	2	
Late period 21-90 days	10	-	
>90 days	4	5	
Erosion rate, n	2	5	.271
Infection rate, n	4	-	.118
Dyspareunia, n	12	11	.852
Urination difficulty, n	10	3	.911
Urinary retention, n	1	1	.330
Bleeding rate, n	5	1	.746
Perforation (bladder, urethra etc.), n	-	-	N/A
De-novo urge incontinence rate, n	-	2	.242
Postoperative follow-up, median(range), month	20(12-84)	26(2-54)	.011*

Interpretation of results

A total of 51 patients in SIMS group (91.1%) and 39 patients in SMUS group (68.4%) answered the question Q1 as "Yes" and statistically significant difference was found between two groups ($p=0.003$). For Q2 , 52 patients in SIMS group (92.9%), 40 patients in SUMS group (70.2%) recommended the surgery for patients with SUI and similarly, statistically significant difference was found between the groups ($p=0.002$).

Concluding message

SIMS is associated with a significantly improved postoperative pain profile and earlier return to work when compared to SMUS with encouraging results in patient-reported satisfaction rates at short to mid-term follow-up. However, additional trials with adequately powered and larger series with long-term follow-up are needed.

Disclosures

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