

## TRANSOBTURATOR TAPE WITH WHIPSTITCH EDGES FOR URINARY INCONTINENCE THAT ALLOWS POSTOPERATIVE ADJUSTMENT AND IMPROVES OUTCOMES

### Hypothesis / aims of study

To investigate if postoperative readjustment at 48-72 hours after transobturator tape (TOT) procedure improves outcomes in 491 women with stress urinary incontinence.

### Study design, materials and methods

491 women underwent TOT surgery between mar-2003/jan2013. Two sorts of sling were used: Sling with whipstitch edges (Contasure Kim System®) and slings without whipstitch edges (Gynecare TVT-O®, Monarc®, I-Stop®, DynaMesh®, Aris® Bandellete and Swing-band®). Patients were randomised to cut the sling immediately after the procedure or deferred 48-72hours to allow readjustment.

We differentiated four groups:

Group A (n=262): TOT with sling with whipstitch edges and deferred cut to allow readjustment 48-72h after surgery;

Group B (n=63): TOT with sling with whipstitch edges and immediate cut of the sling at inguinal level;

Group C (n=61): TOT with sling without whipstitch edges and deferred cut to allow readjustment 48-72h after surgery;

Group D (n=105): TOT with sling without whipstitch edges and immediate cut of the sling at inguinal level.

Success' percentage of the procedure was investigated, being success the absence of urinary incontinence or of voiding difficulty, the possibility to readjust 48-72h after the procedure replacing the sling and end results of the procedure. ICIQ-SF and SF36 Health Survey questionnaires were used. Descriptive statistics, ANOVA, Student's t-test, Fischer's exact test;  $p < 0.05$  was considered significant.

### Results

Homogeneous age ( $p=0.6512$ ), median 61.71y (37-86). Table 1 shows the results in terms of procedure's success (%), number of patients with voiding difficulty or stress urinary incontinence after surgery, readjustment's possibility 48-72h after the procedure replacing the sling and end results of the procedure.

Group A shows better outcomes than Group B ( $p=0.0254$ ), Group C ( $p=0.0001$ ) and Group D ( $p=0.0001$ ) with readjustment, and better outcomes than Group D without readjustment ( $p=0.0001$ ). Group B shows better outcomes than Group D ( $p=0.0020$ ) but not than Group C ( $p=0.1985$ ). Group C shows not better outcomes than Group D ( $p=0.0984$ ).

### Interpretation of results

TOT procedure's success correcting urinary incontinence is high with all slings used. 48-72 hours postoperative readjustment, relaxing or tensing the sling, is easy and possible with whipstitch edges sling, which shows a firm and soft structure that allows readjustment without deformation or stretching. The possibility to adjust the sling increasing the tension raises success rates. The number of re-interventions to cut the sling in obstruction cases is also decreased.

In our opinion, the overcast stitch makes the sling easier to handle and regulates sling's adherence to the patient's anatomic structures. When sling without whipstitched edges were used, it was not easy to replace the sling 48-72h after the procedure. The results suggest that success is greater with whipstitch edges transobturator sling.

### Concluding message

Urinary incontinence's repair with transobturator tape with whipstitch edges achieves best outcomes with or without postoperative readjustment. Long term follow-up and wider studies are needed to confirm these findings.

### Tables and Figures

**Table 1:** Results after surgical treatment of urinary incontinence by using whipstitch edges sling (Contasure Kim System®) or other slings without whipstitch edges and with or without postoperative readjustment.

	Success (%): No urinary incontinence and no obstruction	Micturition difficulty (n)	Re-intervention because urinary obstruction (n)	Urinary incontinence (n)	Postoperative adjustment	End success (%)
Group A (n=262)	88.55	12	0	18	Yes	98.09
Group B (n=63)	90.47	3	3	3	Not possible	90.47
Group C (n=61)	81.96	5	3	6	Not possible	81.96
Group D (n=105)	69.52	17	10	15	Not possible	69.52

Disclosures

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