

## MORE THAN ONE TVT IS THE SOLUTION IN CASES WITH PREVIOUS FAILED TVT?

### Hypothesis / aims of study

During 1996 Ulmsten described the first cases with TVT for stress urinary incontinence treatment. During 2008 was published the long-term effectiveness and safety after follow-up of eleven years in which ninety percent of the women had both a negative stress test and a negative pad test being objectively cured.<sup>1</sup> But the question arises what to do when a TVT presented failure?. In general, publications about this subject are limited. Some authors demonstrated the TVT as a second operation could provide an overall cure rate of 74% with a low complication rate in female patients with recurrent stress urinary incontinence after previous failed mid-urethral sling procedure.<sup>2</sup>

We hypothesise that in women with previous failed TVT a second TVT could provide a high cure rate with low complications. This study aims to determine the effectiveness and safety of applied a second TVT in cases of previous failed TVT.

### Study design, materials and methods

Prospective study of 10 women admitted for management of recurrent stress urinary incontinence after TVT, at Urogynecology and Vaginal Surgery Unit, Clínica Las Condes, Santiago, Chile. Between January 2005 and January 2009 a total of 10 consecutive women were studied with urodynamic test for recurrence of stress urinary incontinence. The 10 women registered incontinence episodes more than once in a week. The urodynamic test showed all cases of stress urinary incontinence type II and intrinsic sphincter deficiency. 7 cases had urethral hypermobility and 3 cases had limited urethral mobility.

The media age was 55 years old (range 42 to 65), with a weight of 62 kg (54 to 80). BMI was 28 (24 to 33) and vaginal parity 3 (0 to 5).

A second TVT was applied without removal the previous failed TVT. A routinely cystoscopy was used. The complications during intraoperative, immediate postoperative and late postoperative time were observed. The follow-up evaluations were at one week, one month, six months and when completed one year after the operation.

Criterion of cure, improvement and failure: the outcome of surgery was classified according to the number of incontinence episodes recorded during the observation period. Cure was considered to the absence of incontinence. Partial cure or improvement was considered to the presence of incontinence episodes less than one every two weeks. Failure was considered when the incontinence episodes were more than once in a week.

### Results

The 10 cases corresponded to women with a previous failed TVT applied between 36 and 6 months.

In all cases de second TVT was applied between 15 and 36 minutes, media 22 minutes. 9 cases were cured, 1 case was partial cured and none was recorded cases with failure. These results were maintained from the first evaluation at seven days until last evaluation at 12 months.

The case with partial cure or improvement corresponded to one woman with limit urethral mobility.

There were no complications during intraoperative, immediate postoperative and late postoperative time.

All patients expressed their conformity with the results.

### Interpretation of results

The TVT appears like a good alternative in women with previous failed TVT. Further when the persistence or recurrence is in women with stress urinary incontinence and intrinsic sphincter deficiency. Some studies compared effectiveness of TVT and obturator sling in women with this association and concluded that TVT is better than obturator slings. This could support the good results to place a second tape type TVT in previous failed cases in which women had stress urinary incontinence and intrinsic sphincter deficiency. It may be explained because the TVT sling is closer to the mid-urethra being in a similar position in "U" and this is better in these cases.

In other experience we published a case with two previous failed TVT in which urodynamic test showed type II and intrinsic sphincter deficiency. In this case a successful third TVT was placed demonstrating that this procedure may be safe and effective.<sup>3</sup>

In none of the 10 cases was identified the previous tape in the sub-mid urethra portion when was applied the second TVT. This may be due to inadequate previous position or because the tape is moved. In the second TVT is not necessary search and remove the tape.

Other point is the case of improvement in which the urethral mobility was limit and no with hypermobility. This may explain the partial cure obtained in the series.

### Concluding message

According our experience in women with recurrent or persistent stress urinary incontinence after failed TVT sling may be treated with a second TVT sling placed without removal the previous retropubic tape. Especially when occurs in a woman with stress urinary incontinence and intrinsic sphincter deficiency with urethral hypermobility. This procedure is safe and effective in a follow-up of 12 months; however only the long follow-up and the incorporation of new patients in this protocol study will allow warranted the permanence of these good results in the time.

### References

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3. Solà V, Pardo J, Ricci P, Lema R, Guiloff E. Successful third consecutive TVT in a patient with two previous TVT failures. J Obstet Gynaecol Can.2007;29(11):903-905.

<b><i>Specify source of funding or grant</i></b>	<b>Clinica Las Condes</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>Clinica Las Condes</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>