

## LONG-TERM RESULTS OF THE TENSION-FREE VAGINAL TAPE (TVT) PROCEDURE FOR THE TREATMENT OF STRESS URINARY INCONTINENCE. THE EGYPTIAN EXPERIENCE.

### Hypothesis / aims of study

The aim of the study is to evaluate the long-term cure rates and late complications rates of the tension-free vaginal tape, a minimally invasive surgical procedure for the treatment of female stress incontinence.

### Study design, materials and methods

A prospective study using a standardized protocol for pre and post-operative evaluation was used to evaluate the long-term results of 150 cases that had undergone TVT procedure for urinary stress incontinence. They were followed-up for periods ranging from 4-6 years. Their mean ages were 55 years. 96% of the patients were multi-parous. The pre-operative assessment includes: a thorough history, a stress test (cough provocation) in the sitting or standing position with a bladder volume of 300 ml, a urodynamic evaluation with urethro-cystometry and a urethral profile measurement was performed.

### Results

The follow-up time was a mean of 64 months (range 48-66). Both objective and subjective cure rates were 85.3% for the 98 women available for follow-up. Pelvic organ prolapse was found in 15.5%, de novo urgency symptoms in 10.2%, and recurrent urinary tract infection in 18.3%. No signs of deterioration of the results over time was observed. No defect in healing or rejection occurred. Only one case of tape bladder invasion was presented in the follow-up period, four years after the initial operation and needed tape resection.

### Interpretation of results

Both objective and subjective cure rates were 85.3% for the 98 women available for follow-up. This result is re-assuring as long-term cure rates of around 70-80% have been reported from the open Burch colposuspension operation, which is regarded as the standard for traditional incontinence procedures (1-2). After 5 years follow up 86.7% of patients found their improvement unchanged, while 3.1% (3 patients) get improved. The rest, 10 patients (ratio 10.2%) reported that the condition become worst. This might reflect change of life style or a medical condition rather than the actual mechanism of action of TVT. Other reported complications, such as pelvic organ prolapse, de novo urgency symptoms and recurrent episodes of urinary tract infection were noticed in some patients. There was no signs of deterioration of the results over time. No defect in healing or rejection occurred. One patient had recurrent lower urinary tract symptoms and needed cystoscopic evaluation which revealed bladder wall invasion by the tape. The patient was managed by resection of the tape vaginally, bladder injury occurred during excision of the tape and repaired through the vagina. A catheter was fixed for 7 days and recovery was complete. Most encouraging is the finding that there was no defective healing or rejection of the tape. This is in contrast to the reports of other sling procedures using other techniques and materials, where, apart from voiding problems a significant number of slings protrusions and defective healing has been observed (3)..

### Concluding message

We conclude that the tension free vaginal tape operation is a safe and effective surgical technique for the treatment of female urinary stress incontinence. The results seem to persist over time.

### References

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<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>Yes</b>
<b>Specify Name of Ethics Committee</b>	<b>Ethical Committee - The General Organization for Teaching Hospitals &amp; Institutes</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>