

EXPERIENCE WITH TVT-SECUR PROCEDURE, TENSIONING OFFERS BETTER RESULTS.

Hypothesis / aims of study

Full length slings are effective, but require invasive surgeries with three incisions, extensive blind needle passages with risk of vascular & visceral damage, major anaesthesia and in-patient hospitalization (1). The purpose of this study is to present the short-term results as regard efficacy and safety of the TVT-SECUR single vaginal incision sling for the treatment of stress urinary incontinence (SUI) in females, and to compare the positive results in early and late cases in accordance with the learning curve of the surgeon.

Study design, materials and methods

A prospective study using a standardized protocol for pre and post-operative evaluation was used to evaluate the short-term results of 50 cases that had undergone minisling TVT-SECUR procedure for SUI.

The procedure was performed through a single vaginal incision. The TVT-SECUR procedures were done in the hammock shape to mimic the TVT-O procedures. The prothetic implant is placed under the mid-urethra and is fixed into the obturator internus muscle.

The mean age was 50.8 years and mean parity was 3.9. All patients were reviewed for a mean duration of 12.2 months after the operation.

Results

The overall cure rate for the 50 cases of TVT-SECUR procedure is 73%. The first fifteen operated patients showed a higher therapeutic failure rate as shown by the persistence or recurrence of stress incontinence (5 patients out of fifteen (33.3%)) and a 66.6% cure rate. In the subsequent 35 patients, there were only 7 patients with recurrent symptoms. There was no vascular injuries or pelvic haematomas and no bowel or bladder perforations. Also there was no pain referred to the groin or the thigh and no vaginal erosion. The only noticed complication was the occurrence of two cases of urinary retention.

Interpretation of results

The overall cure rate (73%) was similar to previously published reports (2). The variation in the failure rate between early and late cases in the series was attributed to the surgeon's learning curve. Failures in the early cases were apparently caused by a defective technique which was subsequently addressed by applying minimal tension upon the mesh and gentle removal of the inserter to avoid pulling back of the tape while extracting the inserter with a higher cure rate of 79.2% in the next 35 patients. This was accompanied by a mean surgical time of 15 minutes. Our results showed that there is a real learning curve as demonstrated by the improvement in outcomes seen over time.

Concluding message

The use of TVT-SECUR, with a mid-urethral single vaginal incision seems to be an effective and safe procedure. Placement of the tape with applying minimal tension upon the mesh and gentle removal of the inserter can protect the run out of the tape and are crucial steps to ameliorate the curative effect.

References

1. Moore R D, Miklos JR, Cervigni M et al: Transobturator sling : combined analysis of 1 year follow-up in 9 countries and 266 patients. Int. Urogynecol. J. Pelvic Floor Dysfunction. 2006;17:\$203
2. Stanford E S, Paraiso M F: A comprehensive review of sub-urethral sling complications. J Minim Invasive Gynecol. 2008;15;132-145.

Specify source of funding or grant	Hospital- government
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	Yes
Specify Name of Public Registry, Registration Number	The general Organization for Teaching Hospitals and Institutes
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Ethical committee of The general Organization for Teaching Hospitals and Institutes
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes