

IS SLING PLICATION EFFECTIVE TO CORRECT PERSISTENT SUI AFTER SUBURETHRAL SLING IN PATIENTS WITH INADEQUATE INITIAL TENSIONING ?

Hypothesis / aims of study

To assess effectiveness of sling plication in patients who remain incontinent after suburethral sling and to evaluate 2D perineal ultrasound in patients screening before such procedure. In patients with urethral hypermobility, TVT or TVT-O has been proven to provide good success rate. Nevertheless, if the sling lies too slack under the urethra, the procedure fails to correct SUI.

Study design, materials and methods

13 patients with persistent bothersome SUI after TVT-O or TVT (Gynecare, Ethicon Inc, Somerville, NJ, USA) were included. Screening of the patients included a physical examination and a 2D transperineal ultrasound in order to confirm sling location and to assess urethral bending at rest and during a stress test and/or a valsalva manoeuvre. In addition, a multichannel urodynamic testing including a free flow rate, filling cystometry, pressure flow studies and a urethral pressure profilometry was performed. To be included, patients had to demonstrate SUI during cough test with a positive mid urethra test (TVT test). Two additional ultrasonographic criteria were required: adequate sling location and no urethral bending during stress test and valsalva manoeuvre. Postoperative assessment included a physical examination with a stress test. All the patients completed the UIQ-7 and the UDI-6 questionnaires at follow-up.

Results

Mean age was 68.7 years [41-79]. Five women complained of pure SUI and 8 of mixed incontinence. Recurrent SUI occurred after a retropubic TVT® in 6 patients and after transvaginal tape obturator TVT-O ® in 7 patients. Mean MUCP was 23.9 [6 – 43]. Patients were offered a simple plication of the sling under local anaesthesia. Plication was performed with a nonabsorbable polypropylene suture (3.0 Prolene, Ethicon, Somerville, NJ). A cough test was routinely performed at surgery in order to adjust sling tensioning. Time between initial procedure and sling plication ranged from 3 months and 6 years. With a mean follow-up of 15 months, we reported a 77% success rate with SUI cured in 9 patients and significantly improved in 1 patient. In these patients mean UIQ-7 and UDI-6 scores were respectively 5.2 and 15.39. Procedure failed in 3 patients (23%) with daily mixed incontinence and mean UIQ-7 and UDI-6 scores at 60.29 and 44.43 respectively. One patient was discharged using intermittent self catheterization but normal and complete voiding occurred within 3 days.

Interpretation of results

This small case series of 13 patients showed that, in selected patients, sling plication is an effective “second step” procedure to correct persistent SUI in patients with inadequate sling tensioning. This is a valid option before to suggest a new sling or another anti-incontinence surgery. This is a painless procedure feasible in day surgery under local anaesthesia with low postoperative morbidity. To optimize the results, patients screening has to be very rigorous. The 2D transperineal ultrasound is an helpful tool that provides informative data such as sling location and degree of tensioning.

Concluding message

Sling plication is effective to correct persistent SUI in patients with previous sling when transperineal ultrasound failed to demonstrate any urethral bending during stress test and valsalva manoeuvre despite an adequate sling location.

<i>Specify source of funding or grant</i>	No Disclosure
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	Request for ethical approval is ongoing (CEROG France). TVT and TVT-O are worldwide performed procedure which have been proven to be safe and effective. In order to improve results, selected and informed patients were offered to have simple plication under local anaesthesia when procedure. failed to cure SUI
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes