

A COMPARISON BETWEEN TVT & TVTO AS REGARDS SAFETY. AN AFRICAN EXPERIENCE.

Hypothesis / aims of study

The aim of the study is to compare between the efficacy & safety of the retro-pubic tension-free vaginal tape (TVT) and the trans-obturator sub-urethral Sling (TVT-O) in the surgical treatment of stress urinary incontinence in females.

Study design, materials and methods

A prospective randomized study was carried on 120 cases. Between the first of March 2003 and end of November 2006, 60 patients underwent TVT by the retro-pubic approach and 60 patients underwent TVT-O by the inside-out technique through the trans-obturator approach for surgical treatment of stress urinary incontinence. Patients with primary uro-dynamic stress incontinence and urethral hyper-mobility were subjected to surgical treatment by either retro-pubic TVT or trans-obturator TVT-O inside-out technique. The pre-operative and post-operative protocol included the following: a detailed urogynaecological history, a thorough physical examination, urine analysis, a stress test with a filled bladder (300 ml), uro-dynamic evaluation, cystometry and urethral pressure profile. The outcome measures were the rate of success and the occurrence of complications. Intra-operative data were collected as those of post-operative course. The outcome of surgical treatment was estimated using the same tools before surgery.

Results

There was no difference between the two groups as regards pre-operative, demographic characteristics, clinical and uro-dynamic parameters. The rate of success was similar in both group 90% in the TVT and 87% in the TVT-O group. There was an incidence of 4% bladder perforation in TVT group compared with none in the TVT-O group. The mean operative time 30 min versus 15 min was significantly higher in TVT group .However more patients had wound aching/pain in the TVT-O group 10 versus 2 in TVT group.

Interpretation of results

Accumulating reports have indicated the efficacy of tension-free sub-urethral tapes which are currently widely utilized (1). In our study, the efficacy of TVT and TVT-O procedure for the surgical treatment of female urinary stress incontinence were comparable, showing a cure rate of 90% and 91.6% respectively. This result was similar to many other reports (2). Bladder perforation was encountered in 5 cases in the TVT group, This was consistent with most previous reports which showed that bladder perforation occur in 0-23% of cases (3).The group of patients which performed the TVT-O procedure had significantly shorter operating time when compared with the TVT group. This could be explained by the absence of cystoscopy needed in cases of TVT procedure. Early post-operative wound aching/pain was higher in patients undergoing TVT-O but no cases had persistent pain in the later follow-up. Two cases of retro-pubic haematoma were encountered within the TVT group and were resolved by conservative management.

Concluding message

We concluded that both procedures are equally effective for the treatment of female urinary incontinence, while TVT-O is a simpler procedure with a less rate of complications.

References

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Is this a clinical trial?	No
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Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes