

EFFICACY OF TVTO IN THE MANAGEMENT OF FEMALE URODYNAMIC STRESS INCONTINENCE AT 4 YEARS FOLLOW UP.Hypothesis / aims of study

To assess the efficacy and complications associated with TVTO application for the management of female urodynamic stress incontinence at 4 years follow up..

Study design, materials and methods

Prospective were recruited In to the study women that underwent the transobturator inside out (TVT-O) operation for the management of urodynamic stress incontinence (USI). Eighty six female patients had been included in the study and eighty one of them were available at 4 years follow-up. All patients underwent transobturator inside out (TVT-O) operation. Patients characteristics such as age, BMI, menopausal status are presented in table 1. All patients included in the study had urodynamic stress incontinence, while patients with mixed incontinence were excluded from the study. No patient had cystocele great than stage I, or previous operation in the anterior vaginal wall and MUCP was > 20 mmHg. Patients were assessed with history, clinical examination, urodynamics preoperatively and at follow up and urinalysis and urine culture before urodynamics. Subjective and objective cure and improvement rate, mean operative time, hospital stay and complications incidence were assessed. Objective cure was defined as a negative cough stress test during multichannel urodynamic examination and a one hour pad test giving a weight of less than 1 gram. Objective improvement was defined as a negative cough stress test and a one-hour pad test weight of less than 5 gr. Failure was defined as a positive cough stress test and urine leakage more than 5 grams in the one hour pad test.

Results

Patient's characteristics are presented in Table 1. Mean operative time was (19.6±7.5 min). Duration of hospitalization was 2.2 ± 0.6 days. The objective cure rate was 86.4 %, the improvement rate was 7.4 % and the failure rate was 6.2 %, while the subjective cure rate was 80 %. The hemoglobin loss was 1.1±0.7 gr/dl.

Incidence of de novo instability was 8.6 % and de novo urgency was 12.3% at 4 years follow-up. No evidence vaginal erosion were seen because of rejection of the tape. No cases of hematomas were observed or if these happened were not symptomatic.

There were five RCTs that compared TVTO with TVT and six RCTs that compared TOT with TVT. When compared by subjective cure, TVTO and TOT at 2-12 months were no better than TVT (OR 0.85; 95% CI 0.60-1.21). Adverse events such as bladder injuries (OR 0.12; 95% CI 0.05-0.33) and voiding difficulties (OR 0.55; 95% CI 0.31-0.98) were less common, whereas groin/thigh pain (OR 8.28; 95% CI 2.7-25.4), vaginal injuries or erosion of mesh (OR 1.96; 95% CI 0.87-4.39) were more common after tape insertion by the transobturator route.

Interpretation of results

There are limited available data concerning midterm efficacy of TVTO Inside-out technique. But, from the available information appears that the results of the present study are similar those published in literature [2].

Concluding message

TVTO appears to be an effective method for the management of female urodynamic stress incontinence in the midterm, as primary operation in patients not having significant relaxation of anterior vaginal wall.

Table 1. Patient's characteristics.

Characteristics	
Mean age (±SD)	57 ± 11.3
Body Mass Index (BMI (kg/m ²))	27.8±4.9
Parity	2.2 (±1.3)
Menopausal	58
Duration of SUI (years)	5.8± 3.1

References

[1]

References

1. Jean de Leval. Novel surgical technique for the treatment of female stress urinary incontinence : Transobturator Vaginal Tape Inside-out. Eur Urology 2003;44:724-30
2. Latthe PM, Foon R, Tooze-Hobson P. Transobturator and retropubic tape procedures in stress urinary incontinence: in stress urinary incontinence: a systematic review and meta-analysis of effectiveness and complications. BJOG. 2007 May;114(5):522-31

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<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>	Yes
<i>Specify Name of Ethics Committee</i>	HOSPITAL ETHICAL COMMITTEE
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes