

MID-URETHRAL SLINGS FOR STRESS URINARY INCONTINENCE: APPLYING URETHRO-VESICAL JUNCTION DESCENT TO PREDICT OUTCOME

Hypothesis / aims of study

Cystourethrography (CUG) is a radiological method used to evaluate the anatomic figures of bladder and urethra as well as to measure the degree of urethral mobility functionally. The aim of this study was to evaluate the clinical outcomes of mid-urethral sling procedure (transobturator tape, TOT) according to urethrovesical junction (UVJ) descent measured by CUG.

Study design, materials and methods

In this retrospective study, 78 women with stress urinary incontinence who underwent the Monarc® mid-urethral sling procedure between January 2006 and December 2007 were included in this study. Preoperative evaluation included complete history, physical examination, urinalysis, voiding diary, 1-hour pad test, urodynamic study and CUG. None of the patients presented the following exclusion criteria: post-void residual volume > 100cc, detrusor overactivity or acontractility, or active urinary or vaginal infection. The position of UVJ was evaluated by CUG at rest and during voiding, and the length of UVJ descent caused by voiding was measured. The patients were divided into four subgroups according to the length of UVJ descent (group A; < 10mm, B; 11-20mm, C; 21-30mm, D; > 30mm). Outpatient follow-up was performed at 1 and 6 months, and every 6 months thereafter. Postoperative continence statuses were classified into three groups (completely dry, improved but sometimes wet, not improved). Postoperative satisfaction score was measured by visual analogue scale (from 0 to 10; 0 score means highest satisfaction level). Postoperative satisfaction score and continence status were analyzed according to the UVJ descent.

Results

The patients' mean age was 52.3 years (32-75 years). The mean follow-up period was 15.4 months (6-30 months). There were no significant differences found in demographics between four groups: mean age, BMI, parity, and menopausal status ($p>0.05$). The numbers of patients were 5 in group A, 36 in group B, 24 in group C and 13 in group D. Of the 78 patients, 62 (79.5%) patients were 'completely dry', 11 (16.7%) patients were 'improved but sometimes wet' and 3 (3.8%) patients were 'not improved'. Mean postoperative satisfaction score measured by visual analogue scale were 0.63 in group A (0-9), 1.42 in group B (0-8), 0.92 in group C (0-3) and 0.88 in group D (0-3).

Interpretation of results

The degree of UVJ descent and postoperative continence status showed no significant correlation ($p=0.273$). The degree of UVJ descent and postoperative satisfaction score measured by visual analogue scale showed no significant correlation either ($p=0.285$).

Concluding message

Although CUG may be a useful tool for evaluating a dynamic change of bladder and urethra, it cannot predict the outcome of mid-urethral sling procedure for the treatment of stress urinary incontinence.

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</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>	Institutional Board Committee of Bundang CHA Hosp. Pochon CHA Univ.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	No