

MEASUREMENT OF THE Q-TIP ANGLE BEFORE AND AFTER THE TRANSOBTURATOR TAPE (TOT) OPERATION: PREOPERATIVE URETHRAL MOBILITY MAY PREDICT SURGICAL OUTCOME

Hypothesis / aims of study

The anatomical and physiologic factors that cause stress urinary incontinence (SUI) are not well understood; however, urethral hypermobility (UH) is generally regarded as the main anatomical abnormality in SUI. A major target of the surgical treatment of SUI has therefore been the suspension of the bladder neck in order to correct UH. The purpose of this study was to compare the results of the Q-tip test before and after the transobturator tape (TOT) operation in women with stress urinary incontinence (SUI) to determine the value of the Q-tip test in predicting the outcome of TOT.

Study design, materials and methods

Between June 2008 and June 2009, 59 women with SUI who underwent the TOT procedure and were followed up for at least 6 months were analyzed. Urethral hypermobility was defined as a maximal straining angle greater than 30° as measured by the Q-tip test. Parameters of evaluation included a comprehensive medical history, physical examination, Q-tip test, stress test, and urodynamic study, which included determination of the Valsalva leak point pressure. Cure was defined as no leakage of urine postoperatively either subjectively or objectively, whereas failure was defined as the objective loss of urine during the stress test.

Results

The patients were divided into two groups according to their preoperative Q-tip angle: <30° (group I, n=21) and ≥30° (group II, n=38). The Q-tip angle decreased significantly in both groups: from 25.9±5.98° preoperatively to 18.4±7.23° postoperatively in group I (p=0.04) and from 36.6±6.75° preoperatively to 24.1±5.48° postoperatively in group II (p=0.03). The difference was obviously pronounced in group II. The incontinence cure rate was significantly higher in group II (97.4%) than in group I (85.7%; p=0.04).

Interpretation of results

These results suggest that the mobility of the proximal urethra is associated with a high rate of success of the TOT procedure and that UH as defined by a Q-tip straining angle of ≥30° above horizontal could be a prognostic value in incontinent women undergoing surgery.

Concluding message

Our results suggest that mobility of the proximal urethra is associated with a high rate of success of the TOT procedure.

References

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Disclosures

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