

EVOLUTION OF DETRUSOR OVERACTIVITY IN PATIENTS WITH MIXED URINARY INCONTINENCE AFTER TRANSOBTURATOR TAPE

Hypothesis / aims of study

The objective of this study is to evaluate the symptoms of detrusor hyperactivity and quality of life in patients with MUI after transobturator tape (TOT-Boston Scientific) through the ICQ-SF questionnaire (International Consultation on Incontinence Questionnaire - Short Form).

Study design, materials and methods

This prospective observational study of 45 patients diagnosed by urodynamic investigation with MUI subject to TOT in the period April 2006 to June 2009. Patients underwent an urogynecological evaluation, classification of pelvic prolapse by the POP-Q (pelvic organ prolapse quantification) voiding diary, pad test, quality of life questionnaire before the surgery and 6 and 12 months after the sling. The analysis of the quality of life of women before and after surgery was done by paired test *t* to compare the instrument used was the SF-ICQ. The analysis was performed using the paired test *t*, with significance level of 0.05.

Results

The follow-up was 14 months. The average age of patients was 53 years (SD = 10.69), 50% were in reproductive age, the mean pad test was 79 g (SD 144.5), 65.6% had frequency and 39.7 % nocturia (voiding diary data). Mean parity was 3.6 (SD 2.7) and weight of most newborn was around 3210gr. The presence of anterior wall prolapse of grade I or II was found in 92.3% and the perineal body measure averaged 3.95 cm (SD = 0.932). The separate analysis of the symptoms of detrusor overactivity (urge incontinence) showed that 10 of them (22.2%) remained with the symptoms and 77.8% were asymptomatic and continent after the surgery. Univariate analysis comparing patients who remained with urge incontinence with those who did not showed that the groups differed regarding the complaint of enuresis ($p = 0.003$), the anterior wall prolapse ($p = 0.025$), pad test ($p = 0.016$) and quality of life ($p = 0.011$). The assessment of quality of life before and after surgery showed a significant improvement in quality of life ($p = 0.001$).

Interpretation of results

Mixed urinary incontinence (MUI) is the urinary loss resulting from the combination of the stress urinary incontinence and detrusor overactivity. The prevalence may range from 50 to 93% of urinary incontinence and the presence of detrusor overactivity is a risk factor for lower success rate of anti-incontinence surgery. However detrusor overactivity can improve by 50 to 74% in patients with MUI after transobturator tape, but can continue in 16 to 40% of cases. Our study demonstrated a cure rate of 78% of the urgency after the surgery. This is important because most of the surgeons are afraid of worst urgency after stress urinary incontinence procedure. And as we could see the majority of the patients get better. %. The main risk factors for the persistence of urge incontinence in this sample were the degree of anterior wall prolapse, the severity of urinary incontinence measured by pad test and the presence of enuresis.

Concluding message

We conclude that patients with MUI after transobturator tape show improvement in symptoms of urge incontinence in 77.8%.

Specify source of funding or grant	None
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Federal University of Minas Gerais Ethics and Research Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes