

OUTCOMES FOR FEMALES WITH SYMPTOMS OF MIXED URINARY INCONTINENCE BUT NO URODYNAMIC EVIDENCE OF DETRUSOR OVERACTIVITY UNDERGOING TRANSOBTURATOR TAPE INSERTION.

Hypothesis / aims of study

Whilst mid-urethral slings have been shown to have excellent results for women with pure stress urinary incontinence (SUI), the outcomes for women with mixed urinary incontinence (MUI) can be less predictable. To investigate this further, we compared subjective and objective parameters with the post-operative outcomes following transobturator tape (TOT) insertion for 171 women with either pure stress incontinence symptoms and urodynamic findings [SUIs/SUIu], SUI symptoms but urodynamic MUI [SUIs/MUIu], MUI symptoms but urodynamic SUI only MUIs/SUIu], or combined symptomatic and urodynamic MUI [MUIs/MUIu].

Study design, materials and methods

Retrospective data was collected on 171 female patients who underwent TOT insertion by a single surgeon between 2004 and 2010. All patients had symptomatic and urodynamically proven stress urinary incontinence, of which 102 had symptoms with or without urodynamic evidence of detrusor overactivity, and a further 10 had evidence of unstable detrusor contractions during filling despite only stress incontinence symptoms. Complete follow-up data was available on 158. All patients underwent pre-operative urodynamics, and all had tried pelvic floor exercises prior to surgery. Symptoms were assessed prospectively, at baseline and periodically during follow-up using the UDI-6/ILQ-7 questionnaire.

Results

Of the SUIs/SUIu group, 11 of the 59 (19%) developed de-novo urgency or urge urinary incontinence (UUI) post TOT insertion. Of the SUIs/MUIu group, 3 of the 9 (33%) had post-operative urgency or UUI. Of the MUIs/SUIu group, 19 of the 61 (31%) had post-operative urgency or UUI. Of the MUIs/MUIu group, 14 of the 29 (48%) had post-operative urgency or UUI. Post-operative urgency or UUI occurred in 21% of patients with pure SUI symptoms compared to 37% with mixed urinary symptoms ($p=0.03$), and in 25% of patients with SUI and urodynamically stable bladders compared to 45% of those with SUI plus urodynamic evidence of unstable detrusor activity ($p=0.02$) (median amplitude of unstable contraction 20cm of water, range 10-150). Of 90 patients with symptoms of mixed urinary incontinence pre-operatively, 46 (51%) were subjectively cured by TOT alone.

Interpretation of results

Around a third of the patients with symptoms of mixed urinary incontinence but no urodynamic evidence of detrusor overactivity pre-operatively still suffered with post-operative symptoms of urgency and/or UUI after TOT insertion.

Concluding message

Females with symptoms of mixed urinary incontinence but no evidence of detrusor overactivity on urodynamics who are undergoing TOT insertion should still be counselled about the potential for post-operative urinary urgency and/or urge incontinence. However, around half may be subjectively cured by TOT alone.

Specify source of funding or grant	None
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	None needed
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes