

THE MALE TRANSOBTURATOR SLING FOR STRESS INCONTINENCE: FIVE YEAR RESULTS IN A UK CENTRE

Hypothesis / aims of study

Male Stress Urinary Incontinence (SUI) is a common and debilitating complication of radical prostatectomy (RP) and Transurethral Resection of Prostate (TURP). Surgical treatment options include urethral bulking agent injection, transobturator sling placement or artificial urinary sphincter insertion. Transobturator sling placement is an established treatment in females and is becoming widely used for male incontinence. We describe our experience and results of this treatment.

Study design, materials and methods

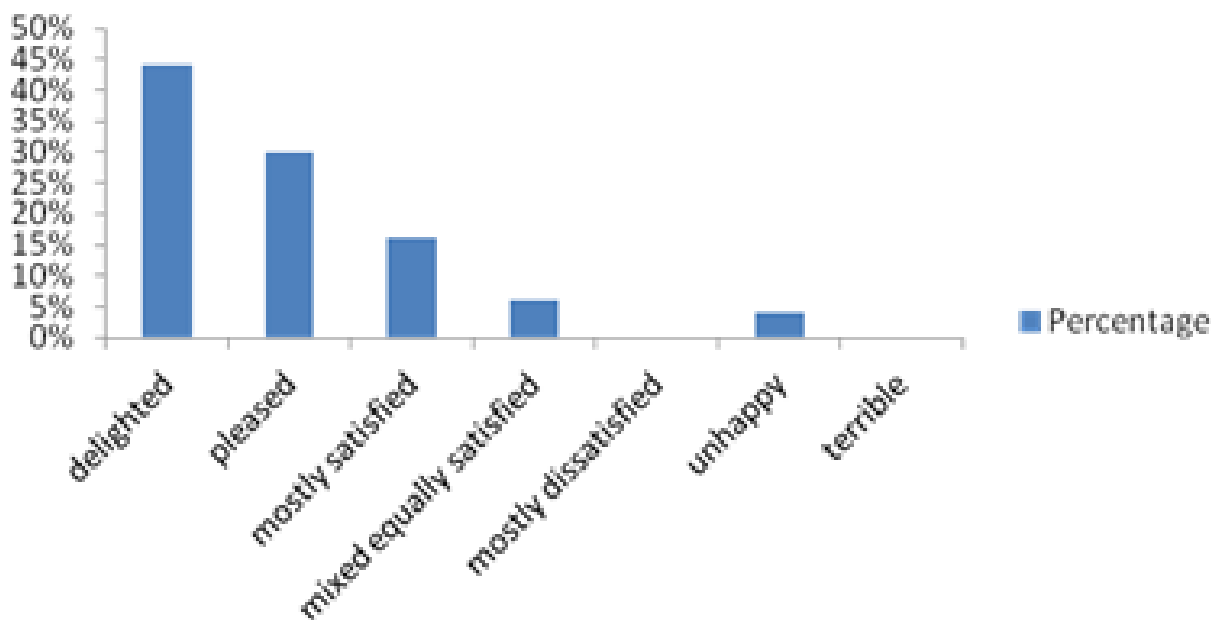
All patients undergoing transobturator sling placement were included in the study. The degree of pre-operative stress incontinence was classified as mild (≤ 2 pads/day), moderate (3-4 pads/day) or severe (≥ 5 pads/day). All patients underwent a trial of non-surgical treatment including pelvic floor exercises and physiotherapy. Pre and post-operative pad use, International Prostate Symptom (IPSS) bother score and quality of life scores from the Global Response Assessment (GRA) questionnaire were recorded. Post-operative complications were classified and reported according to the Clavien-Dindo system.

Results

Fifty men were included for analysis with a mean age of 69 [range 56-85]. The aetiology of stress incontinence was RP n= 47 (94%) and TURP n=3 (6%). Twelve patients (24%) had undergone previous radiotherapy. Male transobturator sling placement was performed by or directly supervised by a single surgeon. The surgical technique used was as described by Rehder and Gozzi [1]. Patients were catheterised intraoperatively and the catheter was removed the following day. Eight patients experience Clavien-Dindo grade I complications -dysuria (2), pain (3) and bruising (3). Three patients failed trial without catheter on day 1 post operatively (Clavien-Dindo grade II) but all went on to have successful trial without catheter subsequently.

SUI Severity	Number	Cured	Improved	No Change	Worse
Mild (≤ 2 pads)	14	12 (85%)	1 (7%)	1 (7%)	0 (0%)
Moderate (3-4 pads)	20	18 (90%)	0 (0%)	1 (5%)	1 (5%)
Severe (≥ 5 pads)	16	7 (43%)	4 (25%)	4 (25%)	1 (6%)
Totals	50	37 (74%)	5 (10%)	6 (12%)	2 (4%)

Table 1: Change in incontinence after transobturator tape. 'Cure' defined as no pads or one pad used for reassurance. 'Improved' defined as improvement in pad usage of $\geq 50\%$ and pad use ≤ 2 pads/ day. 'Worse' defined as any worsening in daily pad usage.



Graph 1: IPSS bother scores post-operatively

GRA Category	Patients	Percentage
Markedly improved	32	64%
Moderately improved	7	14%
Slightly improved	5	10%
No change	2	4%
Slightly worse	3	6%
Moderately worse	1	2%
Markedly worse	0	0%
Total	50	100%

Table 2: Global Response Assessment of pre-operative versus post-operative symptoms

Interpretation of results

The overall cure rate of stress incontinence with the transobturator sling was 74%. Improvement in stress incontinence, as objectively assessed by average daily pad use, was seen more in patients with mild or moderate incontinence than severe incontinence. Subjective bother scores and GRA assessment improved for the majority of patients. The incidence of adverse effects was low with no complications of Clavien-Dindo grade III or above.

Concluding message

These results show that the transobturator sling is an effective and safe treatment for male stress incontinence over the medium term. Some advantages of the transobturator sling over the artificial urinary sphincter that have been suggested include easier surgical insertion, no mechanical parts which might fail and less requirement for revision surgery. Our results suggest good effectiveness for mild and moderate incontinence but less so for severe symptoms. Further studies are required to determine the exact indications for transobturator sling treatment and their effectiveness when compared directly to the artificial urinary sphincter in a randomised-controlled trial.

References

1. Rehder P, Gozzi C. Transobturator Sling Suspension for Male Urinary Incontinence Including Post-Radical Prostatectomy. Eur Urol 2007;52:860-867

Disclosures

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