

TRANSVAGINAL RELEASE FOR PROLONGUED VOIDING DYSFUNCTION AFTER TENSION-FREE VAGINAL TAPE PLACEMENT: LONG-TERM RESULTS

Hypothesis / aims of study

To report our experience with the transvaginal release of tension-free vaginal tape for the treatment of prolonged voiding dysfunction and impaired voiding symptoms, and the clinical long-term results.

Study design, materials and methods

Medical records were reviewed and data extracted for all patients who underwent a transvaginal release after tension-free vaginal tape procedure between January 2000 to December 2012. The study population consisted of 3680 women: 1516 cases of retropubic (RP) approach and 2164 cases of transobturator (TO) approach.

Intrinsic sphincter deficiency was defined as maximal urethral closure pressure < 20cm H₂O. Hypermobility was defined as straining urethral angle of >30 degrees

Our definition of prolonged voiding dysfunction was the requirement of intermittent catheterisation beyond the second week of surgery, with post mictional residue over 100 ml and impaired voiding symptoms or impaired voiding symptoms (regardless of the value of residual urine) with severe irritative symptoms or recurrent urinary tract infections.

Impaired voiding symptoms was defined as a departure from normal sensation or function during or following the act of micturition (hesitancy, straining, slow stream, feeling of incomplete emptying, or position-dependent micturition).

The release consists in section or in partial removal of the tension-free tape by vaginal approach.

Findings were based on objective criteria (Stress test, postvoid residual by catheterization and urine culture), and subjective criteria addressed on an anamnesis directed on voiding symptoms and urinary incontinence symptoms. Furthermore a questionnaire to assess patient's satisfaction was distributed.

For the statistical analysis we used the chi-square test or the Fisher's using the statistic programme SPSS v 18.0.

Results

In 61 patients (1.6%) was necessary the section or partial removal of the sub-urethral tape. In 3 cases there was also pain and dyspareunia associated. Only 1 case of pain relieved.

The average age of women in this study was 60 years (range: 31-84) with an average years of menopause of 12.7 (range:0-31). The average parity was 2.2 (range: 0-6).

The incontinence was mixed in 21 (34.4%) women, 8 of them had detrusor overactivity in the urodynamic study previous incontinence surgery. 35 (57,3%) patients had Intrinsic sphincter deficiency and 33 (54%) required concomitant surgery. 59 (96.7%) patients underwent the tension-free vaginal tape procedure with spinal anesthesia and 2 patients under general anesthesia.

After section or partial remove of the tape a 78.6% of the patients improved impaired voiding symptoms and 17.9% had recurrence of stress urinary incontinence. Persistent Irritative symptoms were recorded in 25 (40.9%) patients.

The average time between surgery and release of transvaginal tape was 203 days (range: 1-1560). No statistical differences were observed when considering the time passed between first surgery and release of tension-free vaginal tape. Table 1

No statistical differences were found between RP or TO.

Only one patient required intervention for active bleeding after partial removal of the tape. No urethral or bladder lesions occurred

No statistical differences were found between section or partial removal of the tape.

The average follow up of the clinical outcomes was 39 months (range: 2-108)

		Clinical results			Overall
		Relief or improvement of voiding symptoms No SUI	Relief or improvement of voiding symptoms SUI	No Relief or improvement of voiding symptoms No SUI	
≤1month	Cases	9	1	2	12
	%	14.7%	1.6%	3.2%	19.6%
>1month < 12months	Cases	10	2	4	16
	%	16.3%	3.2%	6.5%	26.2%
≥12months	Cases	18	8	7	33
	%	29.5%	13.1%	11.4%	54.0%

Table 1. Time between first surgery and release of tension-free vaginal tape. SUI: Stress urinary incontinence

Interpretation of results

In our study we found a very low incidence of section or partial removal of tension-free vaginal tape (1.6%) after incontinence surgery. Furthermore we found that this kind of operation relieves or improves the impaired voiding symptoms (78.6%) of the patients. The vaginal approach is an easy technical procedure that can be performed with local or regional anesthesia. There is only a 17.9% of recurrence of SUI and 40.9% of persistent Irritative symptoms.

It's important to notice that the results do not depend on the time passed since the anti-incontinence procedure nor the type of surgery (RP/TO). More studies are required in order to confirm our results. This could increase the practice of section or partial removal of tension-free vaginal tape.

Concluding message

The section or partial removal of sub-urethral tension-free vaginal tape used in the surgical treatment for stress incontinence, due to prolonged voiding dysfunction, showed good results with a 17.9% of recurrence of SUI. The results showed no statistically significant differences regarding the type of surgery (RP/TO) or the time between anti-incontinence surgery and section/partial removal of the tape. Irritative symptoms persist in 40.9% of patients.

References

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Disclosures

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